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AUTHOR	Rittenhouse, Carl H.
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ABSTRACT

Six school district case studies are contained in this appendix to the report of a project that studied the relationships between processes and outcomes of the implementation of career education programs in six diverse school districts located throughout the country. Each case study gives background information on the local education agency prior to the 1974-75 implementation year, explains how the implementation plan was created in 1974, and describes the key project characteristics and implementation activities and outcomes that took place in 1974-75. (Capsule summaries of the six school district settings are included in the main body of the report, which presents the research background, objectives, and findings--CE 014 398. Procedures are detailed in another appendix--CE 014 399). (JT)

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A STUDY OF CAREER EDUCATION IN SIX SCHOOL DISTRICTS

Appendix B — Case Studies

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By: Carl H. Rittenhouse

Prepared for:

Department of Health, Education and Welfare
National Institute of Education
Washington, D.C. 20208

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ABSTRACT

Career Education (CE) was conceived as a means of bringing work and education closer together. The concept is substantially broader than that of vocational education, which has most often concerned itself with imparting skills for a limited number of occupations. Career Education is meant to be a component of lifelong learning, preparing the learner for a varied succession of jobs and also for the enjoyable use of leisure time.

The processes and outcomes of the implementation of Career Education programs during 1974-75 in six diverse school districts located throughout the country were examined during this study by SRI International. The districts had been chosen originally to participate in the development of the federally sponsored Comprehensive Career Education Model (CCEM). The planning process, however, was not limited or restricted to use of the CCEM curriculum units that had been developed and, in fact, only limited use was made of them in most cases.

This study was designed to use both formal questionnaires and case study methods in gathering information, because site visits indicated that the districts and the CE programs to be implemented were quite diverse. The case studies make use of statistical, interview, and documentary data in describing and analyzing the implementation programs.

The study indicates strong acceptance of CE goals among the education personnel in the six school districts and a willingness to incorporate the concepts into their programs. There is little evidence that CE is seen as a driving idea that will solve a substantial part of education's problems. CE is seen as useful and perhaps necessary, but only one of a variety of reforms that should be undertaken, and probably not the most important one. Career Education is not perceived as a radical reform, and it fits comfortably into elementary curricula. At the secondary level, it is difficult to distinguish CE from vocational education. Cross district analyses indicate no substantial relationships bearing on CE implementation with respect to either teacher or student characteristics. There was little community involvement in planning and none in direction of the program.

Tailoring Career Education to local needs is the strongest single influence on classroom practice, with the outsider role limited to providing materials and other support to be used appropriately by district personnel. If there is a federal desire to establish uniformity in the programs it supports, it will be necessary to develop precise definitions and monitor expenditures so that innovation integrity is maintained.

The following is a set of relationships that enhance the chance for successful Career Education implementation:

- Training and involvement between the user, adopter, and developer groups.
- Explicit perception by the user group of its goals and its new role.
- Favorable attitudes toward change by the user and adopter groups.
- Favorable attitudes toward innovation by the user and adopter groups.
- Innovation with simple and defined characteristics.
- Compatible characteristics of the students and the innovation.
- Accessible and extensive innovation materials.
- Community support of innovation.
- Appropriate background and experience of the user group with the innovation.

Implementation of Career Education is a complex process, and the settings in which it takes place vary greatly. For those reasons, clear cut relationships among CE implementation factors and CE implementation success are difficult to establish.

This report is supplemented by two appendices (Appendix A--Procedures and Appendix B--Case Studies) which are printed as two separate volumes.

CONTENTS

Appendix B

ABSTRACT ii

CASE STUDIES 1

System I 2
System II 11
System III 21
System IV 29
System V 37
System VI 52

Appendix B

CASE STUDIES

This study was designed to use both formal questionnaires and case study methods in gathering information, because our initial round of visits to the sites indicated clearly that both the districts and the CE programs to be implemented were quite diverse. We sought the same kinds of information gathered in a systematic fashion at all sites so that cross-site comparisons could be made, but it was obvious also in view of the diversity that the greater depth and explanatory power obtained through case analyses would be highly desirable in describing the programs, the implementation plans and the implementation itself, and in interpreting the statistical and other findings. The case studies following make use of statistical, interview, and documentary data in describing and analyzing the implementation programs.

Each case study gives background information on the LEA prior to the 1974-75 implementation year, explains how the implementation plan was created in 1974, and describes the key project characteristics and implementation activities and outcomes that took place in 1974-75.

System I*

Schools

System I enrolls about 6,000 students; 65% are white and 25% black. The five elementary, one middle, and one senior high school are staffed by about 460 teachers; 90% are white and 10% black.

About 70% of the high school students are enrolled in college preparatory courses, but only 55% actually enter 2-year or 4-year colleges. Of the 30% not enrolled in college preparatory courses, about 5% are in general education and about 25% are in vocational education. However, almost 50% head for work upon graduating from high school: almost 40% seek jobs and almost 10% enter business or trade schools. This indicates that the distinction between college preparation and employment preparation is not sharp in System I.

Career Education History Before CCEM

In 1958, System I's superintendent of schools criticized the college preparatory focus of System I high school. Attempting to develop programs for students who planned to enter employment immediately after high school graduation, he authorized new policies that required that all field trips had to incorporate a "world of work" experience and that one-fourth to one-half of all books acquired for the elementary school libraries had to be related to "world of work" themes. He and his staff made recommendations to the Board of Education on the necessity for including information about jobs in the curriculum.

Faced in the early 1960s with a growing influx of working-class blacks and members of other minority groups, the System I schools had to reexamine their curricula for meeting the needs of these lower-middle and middle-class students. They found that prevocational programs were virtually nonexistent. The Board of Education responded by approving courses to supplement the traditional secretarial and "shop" courses already available.

At the same time, a consultant study pointed to a need for reorganizing the System I schools to achieve greater racial balance. The report also recommended an expansion of vocational offerings, particularly programs of vocational guidance, exploratory experiences, career preparation, and placement services.

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*Case studies for Systems I and V were prepared by H. Mitchell Brickell of Policy Studies in Education, New York, New York.

System I's general curriculum was criticized again in 1963. Meetings were held among the administrators to consider and identify more suitable alternatives for the non-college-bound student. Contacts were made with local businesses having an interest in improving school curricula for work-bound students.

A group of staff members interested in emphasizing industrial preparation for students planned and operated a pilot program for tenth graders, with outside funding, beginning in September 1965.

Thus the system's first outside funding for a work-oriented curriculum development effort began, and the state grants continued to support summer curriculum development efforts in industrial preparation through 1969.

In addition to industrial preparation, a work-study program in Cooperative Industrial Education was created at the high school. The work-study program represented a better program for the work-bound students. A course was created emphasizing occupational awareness and job-seeking skills.

By 1969, System I had made its mark as the preeminent school district in the state for establishing and carrying out successful vocational programs for students. As the Vocational Education Act (VEA) Part D Exemplary Project funding became available, the system was ready and able to prepare a proposal and have it accepted by the fall of 1970. The Exemplary Project had as its basic goal the creation of a model in which career development concepts could be incorporated into regular classroom activities.

A number of other work-oriented programs were initiated in the district after 1970: Technology for Children, Introduction to Vocations, and Cooperative Education. In addition, a Career Resource Center was established and staffed by media and career education specialists. This staff was trained to help teachers at all grade levels to implement career education activities in their classrooms. The staff carried out such tasks as arranging field trips, recruiting speakers, gathering materials, and suggesting activities in classroom projects. As a result of all these activities, Career Education became a significant part of the educational offerings in the system.

The Implementation Plan for 1974-75

All of the 6000 students and 450 staff members in the system were to be involved in some form of Career Education in 1974-75. Every student was to get at least one curriculum sequence or two Career Education activities as part of the standard curriculum. The infusion process was adopted as a way of implementing Career Education in the schools. A great deal of curriculum revision was taking place, and Career Education was being infused into most of the academic areas and courses. CCEM units were used

as resources. There was a Career Education specialist in each school. High school teachers had had in-service training in Career Education. The planning grant was used to plan the infusion implementation and to get teachers to develop high school Career Education units in the summer. The plan also provided a means of explaining the program to the board and indicated a coordinated approach so that the board may have been more willing to provide funding. Four full-time people constituted the Career Education staff.

Project Characteristics During 1974-75

Career Education in System I retained some of the characteristics of a special project during 1974-75. That is, Career Education had not been fully incorporated as a part of the established educational system: it was the responsibility of a special, still-temporary group of people who advocated and assisted with its implementation. For that reason, the administration and staffing of career education are worth examining before proceeding to a description of the implementation activities themselves.

Administration--The person appointed as coordinator of Career Education had previously served the CCEM project as a specialist in community involvement. During 1974-75, he served not only as project coordinator but continued part-time in the job he had held prior to CCEM: director of adult education.

The project coordinator reported directly to the assistant superintendent for instruction, who was a veteran line administrator, close to the superintendent of schools and a powerful administrator in his own right. Thus, the project enjoyed a location high in the administrative hierarchy.

Below the project coordinator, there was no hierarchy: the six staff members reported to him directly, although the Career Education specialist who was engaged in designing and writing curriculum units had a senior relationship with the coordinator.

Staffing--The project was staffed by the following positions during 1974-75:

Career Education Project Staff	Amount of Time
Career Center Staff	
Coordinator of Career Education	75%
Career Education Specialist	80
Media Specialist	75

Career Education Project Staff	Amount of Time
Elementary School Staff	
Resource Specialist	100%
Resource Specialist	60
Middle School Staff	
Resource Specialist	100
High School Staff	
Resource Specialist	100

This table does not include five senior high school work-study program coordinators and one work experienced career exploration program teacher who were listed by System I in its implementation plan as part of the career education project staff, but who, in fact, can be better understood as associated with the vocational education program.

Areas of Activity

General Description--System I carried out its 1974-75 implementation plan largely as it had intended. No major unforeseen events either in the schools or in the community interrupted. During 1974-75, administrative support from the central office continued to be strong; the full Career Education staff reported for duty in September as planned without a single change of face; the new social studies curriculum development work proceeded roughly on schedule, with career concepts and activities infused into each new unit, occupying about 20% of the space; the money budgeted for career education was made available and was spent as planned; the offices for the project staff both in the Career Development Center and in the elementary, middle, and high schools were still assigned to them, as they had been in earlier years.

The past and anticipated movements of the project staff within the boundaries of System I help explain their leadership style during 1974-75: quiet advocacy, steady interest, and competent performance--all low key.

Their greatest strength during 1974-75 was their willingness to assist classroom teachers and counselors with the daily work of Career Education that teachers found hard to do while teaching their classes: arranging trips, inviting speakers, and getting special equipment and materials. Even the coordinator was able to spend some time working directly with teachers and counselors, given System I's small size. Teachers reported that Career Education project staff members were the primary source of support, providing up to two hours per month of assistance. The most common kinds of support were locating and obtaining CE materials and making arrangements for trips, visits, and speakers.

Most project staff time went into direct face-to-face assistance to teachers, counselors, and librarians. Substantially less went into infusing career concepts into the new social studies units then being developed and into suggesting and supplying existing instructional materials. As indicated by questionnaire responses, CE goals and objectives were presented and explained at a training session or meeting and printed lists were distributed.

There were no major modifications of the existing career curriculum during 1974-75, other than the continuing requirement that all teachers incorporate career units and/or career activities into their classroom work. About 82% of teachers reported that they were required to teach a specific number of CE hours, units, or activities, but no more than 5 hours, 2 units, or 2 activities per semester were required.

There was no strong effort to develop or to select new instructional materials, other than the continuing development of new social studies units. Questionnaire responses indicated that the most available instructional materials were lists of goals and objectives, audio-visual products, curriculum guides, and CCEM materials. About 75% of teachers reported that CE materials were available from a central location within their buildings. More than half said that 50 or more items were in that location. Some 87% reported that less than ten different items had been placed in their individual classrooms.

There was no staff development, other than face-to-face help to individual faculty members. However, almost 80% of teachers reported having received CE training at one time or another. Of these, no more than 25% had received such training since June 1974, which was the period of active implementation. About 50% had, however, used self-instructional materials during that time. Of those receiving training since June 1974, 61% had 5 hours or less, and 11% had 20 or more hours. The most common training modes were workshops and lectures. Training was most often conducted by the CE project staff. Major attention in training was given to orientation to CE goals and objectives, instructional materials, community resources, and understanding of teacher roles in CE. Of those participating in training since June 1974, more than half stated that they were required to do so. Most training took place during or after school, and there was no extra compensation for it in most cases.

There was no major attempt at community involvement, other than arranging specific trips and inviting specific speakers for teachers needing that kind of assistance.

There were no major special projects containing career elements introduced either into the schools or into the community during 1974-75. There was no dramatic change in guidance or placement practices. There was no formal evaluation activity.

District and School Administrative Staff--Administrative support for career education continued to be steady during 1974-75. The Superintendent, the Assistant Superintendent, and other central office personnel responsible for curriculum and for special projects continued their endorsement of Career Education. They mandated that every teacher in System I from kindergarten through grade 12 use one or more Career Education curriculum units or two or more specific classroom activities. In System I more than in any other LEA, the central office administrators stood squarely and visibly behind Career Education throughout 1974-75.

Although they seem to have been positive about or at least permissive about Career Education during 1974-75, just as they had been in previous years, the principals did not seem to have regarded it in the same way as reading, writing, and arithmetic. That is, they do not appear to have held themselves personally responsible and accountable for career learning. However, all six principals helped to review or critique program goals and objectives. Four helped to create the goals and objectives. Four received lists, and five attended training sessions or meetings at which they were discussed. They lent their support and their friendly encouragement, but it was still the program of the central office and the project staff rather than their own. The principals were, for example, not the source of the mandate that every teacher engage in career education. They presumably did not disagree with the mandate, but they were not its authors. That left the project staff in the position of advocating Career Education with the principals' permission and endorsement rather than in the position of helping teachers carry out what the principals--along with the Board of Education and the superintendent--had declared to be part of its basic program. Principals reported that support was received primarily from CE project staff members and consultants from outside the system. Most support was in the areas of locating and obtaining CE materials, making arrangements for speakers and trips, and helping teachers to develop CE materials.

All principals reported that they had received CE training. Half had received training both before and after June 1974, and the other half only before that date. None of those receiving training after June 1974 had more than 5 hours. Lectures, workshops, demonstrations, and formal group discussions were the most common forms of training. Training was conducted primarily by the CE project staff. Two stated that they had been required to participate in training since June 1974. Major attention in training was given to understanding of CE roles, curriculum development, orientation, goals and objectives, community resources, and CCEM. Training activities took place in the summer, and no extra training compensation was provided.

Materials were also available to them. They included lists of goals and objectives, curriculum guides, audio-visual products, and bibliographies of CE materials. All six said that materials were available in their buildings, and five indicated that 50 or more items were placed there.

Instructional Staff--System I's implementation plan required all teachers in grades K-5 to teach one or two new career-infused social studies units or to conduct at least two career activities. Roughly the same requirements were made for teachers in grades 6-8. The plan was similar for grades 9-12, except that units in other subjects substituted for units in social studies at specified grades. Teachers not teaching those units in grades 9-12 were required to conduct at least two career activities. Moreover, the plan called for teachers to report their classroom career activities on standard forms supplied for that purpose.

System I is small enough and the project staff was large enough for them to track what teachers did during 1974-75. As the project staff observed the scene, a majority of the teachers complied with the mandate. A substantial fraction did it with evident enthusiasm, competence, and here and there a touch of creativity. A larger fraction evidently did it routinely, but well enough to meet the letter if not the full spirit of the mandate. A substantial fraction apparently managed to get through the year without genuine compliance.

Outcomes

System I's execution of its implementation plan in 1974-75 had a number of effects. Some showed up in classroom activities, as already explained and as elaborated below. Some showed up in student learning, which went unmeasured but about which teachers offered their opinions, as explained below. Some had to do with the institutionalization of career education and the building of richer resources for carrying it out. Those last effects are discussed in a later section.

Outcomes of the implementation process at System I as indicated by questionnaire responses of teachers include the following:

- Of the 285 teachers surveyed, only 15 (11%) said that they had no role in the CE program.
- Among the teachers, 46% taught less than 1 hour of CE per week, and 9% taught none. Five or more hours per week were taught by 10% of the teachers, and 35% taught 1 to 4 hours per week.
- With respect to the estimated benefits of CE instruction to students, 17% of the teachers felt that very few were benefiting and 3% that none were benefiting. About 59% felt that most or almost all of their students were getting beneficial results from the instruction.
- The most-used instructional materials were lists of goals and objectives, audio-visual products, CCEM units, and curriculum guides.
- The most common roles in the program were teaching CE lessons, using community speakers in classroom instruction, taking students on trips to job sites, and reviewing and selecting from existing CE materials.

Outcomes as indicated by principal questionnaires include the following:

- Some 67% of principals felt that almost all the students in their schools benefited from CE instruction and that 75% to 94% of students accomplished its goals and objectives. None of the respondents felt that few or none of the students benefited.
- Five out of the six principals indicated that 95% to 100% of their students were participating in CE programs. The remaining one indicated a participation level of 75% to 94%.
- Five out of the six principals indicated that 75% to 100% of their teachers were making special efforts to teach CE in their classrooms, and one estimated a 50% to 74% level.

Discussion and Comment

The previously discussed outcomes of the CE implementation program suggest that in terms of teacher involvement and judgement of benefits to students, the program was successful and that CE will continue as a significant part of the instructional program. The number of classroom hours taught per week by most teachers could be regarded as small, but by the standards of the district relating to what was sought in the way of accomplishment, even that outcome is satisfactory. The key factor in implementation was the effort of the CE project staff. Training was undertaken and materials and support were provided.

Most teachers were probably oriented positively toward CE. Some 83%, as indicated by questionnaire responses, had had previous experience in developing or using materials, and only 34% had had no previous CE planning involvement. Almost all (92%) stated that they were familiar with CE goals and objectives; some 69% said that goals and objectives fitted well with their curricula; and only 13% felt that it was not important for students to achieve the CE goals and objectives. Adding to this favorable climate was the fact that all six of the district principals had had a lot previous CE planning involvement, were familiar with the goals and objectives, and felt that they were appropriate to their curricula.

Both teachers and principals perceived attitudes toward CE to be highly favorable and felt that most groups would support curriculum change.

Most teachers felt that the training they had received was appropriate to their teaching activities, but some 36% felt they they had not received enough training. Although favorably disposed toward the training, some 60% would have preferred some kind of training other than CE, and 39% said that training had little or no influence on their teaching. None of the principals felt that they had received too little training. All agreed that the training was appropriate to their activities, but half would have preferred training in other programs than CE. Only 15% of teachers

were uncertain of their roles in CE, and no principals expressed any uncertainty. The CE project staff had been the most instrumental factor in helping them to understand their roles.

Another significant factor in implementation is the availability of good materials. About three out of four teachers felt that materials were adequate in quantity and quality. Primary sources were of the teachers' own development and CCEM.

In the area of staff support, about 79% of teachers felt that it was appropriate to their needs; only 21% felt that it was not adequate. Some 85% indicated that support was easy to obtain. All principals expressed positive views as to appropriateness and adequacy of support as well as ease in obtaining it.

Although CE in general was regarded as being important and worthwhile, only half of the teachers found the particular program to be satisfactory, and 34% said that it was not satisfactory. Only 16%, however, felt that the program should not be continued, and 31% indicated that it was suited to only a small number of students. About 43% regard CE as not being an important element in their teaching, and 50% felt that other programs were more important. Among the principals, attitudes are somewhat more favorable. All but one agreed that the program seemed very satisfactory, and all felt that it should be continued, with half expecting it to be expanded. None felt that CE was suited to only a small number of students. All indicated that CE was an important part of their programs, but two thought that many other programs are more important.

The combination of positive attitudes, administrative support, project staff activity, training, and the provision of adequate materials appears to have resulted in an orderly implementation process and a result satisfactory to the district. The program will probably be continued in some form, and it may be expanded. Given high levels of motivation and the use of conventional implementation techniques, System I has achieved its goals.

System II

Schools

About 27,000 students are enrolled in System II schools. There are 24 elementary schools, 6 junior high schools, and 3 senior high schools. The instructional staff is composed of 1559 teachers, 95% of whom are white.

With respect to high school students, no figures are available as to proportional enrollment in college preparatory classes, but about 65% actually enter college and 35% go into the work force.

Career Education History Before CCEM

District personnel give the year 1966 as the official beginning of Career Education programs or projects in System II, but concerns about the need for career-related education had been expressed prior to that time by a variety of individuals and groups both inside and outside of the school system. Questions of curriculum relevance had been raised particularly with respect to what would now be called Career Education. Questions and concerns became more acutely focused soon after the arrival of a new superintendent in 1967. The new superintendent (still the system's chief administrator) came with a history of having created and carried through innovative programs in his previous assignments in other districts. His interest in providing meaningful programs tailored to the specific needs of students extended considerably beyond improved curricula to such things as the planning and design of facilities to meet special instructional needs.

Prior to the arrival of the new administrator, a committee devoted to examining some of the educational concerns in the community and district was formed, but there had been more talk than action to that point. The superintendent's interest was directed toward the revitalization of the committee by increasing its areas of operation. Public information programs were expanded so that the community at large would be more aware of facts such as that although the curriculum was based on an assumption that 90% of students would go to college, only about 65% actually enrolled and only 15% of those achieved degrees. This suggested that a substantial proportion of students might be making their way through an inappropriate curriculum. Knowledge of job markets and job requirements and ability to make career decisions were also lacking for many students who were in immediate need of such information and skills.

In 1967, the Chamber of Commerce expanded its interest in education and sponsored a conference with local leaders to examine some of the problems. Thus, mutual support between the community and the schools was generated, and changes began to be made. An $18,000,000 bond issue was approved in 1971, and a considerable amount of the money was intended for conversion of one high school into a regional vocational education

center. District staff and teacher personnel assigned to work on the conversion project concluded that the plan should be carried even further so as to apply vocation-related concepts to all levels including the elementary grades.

The district's ESEA Title III funds, first obtained in 1966, were used to establish a Center for Educational Advancement, the major purpose of which was to facilitate educational change. This also gave impetus to the movement for greater educational relevance.

Both the district and the community were interested in educational change, and initiatives in a number of directions had been taken. The district was both ready and qualified to participate in the CCEM development when the opportunity came, and it was selected for those reasons.

Implementation Plan for 1974-75

The plan called for a very extensive program involving both curriculum and guidance. The emphasis of the ongoing program was on assembly and development of materials, products, and human resource services for classroom use. The plan was aimed at implementation through use in the curriculum and concerned itself with comparison of a number of strategies for increasing utilization of resources. The focus was on the voluntary use of resources by teachers. There was no mandated program, but a number of techniques for encouraging use were developed. The original intention was to use four different techniques, one in each of four groups of six elementary schools, and make experimental comparisons of the techniques. It was not possible to carry that systematic plan out in the 1974-75 year, but the various techniques were to have been used in ensuing years and their outcomes assessed in those schools in which they were employed. The overall aim is to determine which strategies or combinations of strategies are more effective in bringing about full implementation, which is defined as use of resources. No kind or group of resources is regarded as being superior to others in furthering Career Education, so the focus is on implementation techniques leading to use, rather than effects of use on students. Finally, the plan was concerned with the determination of methods to be used in assessing the extent to which CE is being successfully implemented in the schools.

The resources to be used in implementation were assembled or developed by the district's Public Schools Center for Career Development over a three-year period prior to implementation of the plan for resource utilization. It should be noted that the CE thrust in the district was not powered by a single, unified, comprehensive CE program, but rather was carried out under three separate programs. The local Career Education project staff developed resources for two programs, the CCEM program, which was federally funded, and the State Department of Education CE program, which was funded by the state. The career guidance program constituted the third activity, for which funding was derived from both federal and state sources. There were overlapping functions and some

inevitable conflict among programs, but in general the individual program efforts seem to have been well-organized and articulated, and the result was a plan for curriculum implementation and a related career guidance development effort. The study reported in this paper is concerned only with the curriculum development part of the CE process.

Project Characteristics During 1974-75

Inasmuch as the plan was not completed until the middle of the 1974-75 school year, implementation had not progressed very far by the time the data for the study reported here were gathered. The Center for Career Development was responsible for designing a sequence of implementation events and overseeing the carrying out of those events. The events included both planning and implementation activities. Included in the sequence were the following:

- Joint review, approval, and evaluation by the combined Career Education and career guidance administration
- Initial planning phase
- On-going operational phase, including implementation of all plans
- A utilization/participation study monitoring evaluation
- Program review.

It should be noted that from the point at which the various resources are fully prepared for delivery of service, implementation is based wholly on the voluntary utilization and participation of teachers, supervisors, and administrators. The most significant step in the process is the Request for Service. Such requests may be directed to the CE staff, to a responsible resource specialist directly, or through a person designated as a provider of career liaison. Career liaison personnel have been assigned to each school as the regular and continuing communication link between the Center for Career Development and the school. It is assumed that the normal event sequence would include a service request to the individual resource specialist through the career liaison person assigned to a particular school, and a response from the specialist to the liaison, who will coordinate with the school principal or other administrator as appropriate. The project director, supervisor, and monitor will also be informed of all services provided. Following delivery and use of the resource, any relevant evaluation information is gathered.

A variety of strategies for implementing CE were developed, but at the time of data gathering for our study, those strategies had not been fully utilized. Thus, the material in the next section regarding implementation activities and outcomes reflects only a very early stage of implementation. It will be of interest, however, to describe the strategies briefly.

Initial Contact Strategy--Five methods of making initial communications contact with target schools constitute this strategy. A standard promotion method for schools receiving only the printed or visual material sent to all schools in the district provides the means to publicize CE. Intensive promotion, the second method, includes all of the materials used in standard promotion, but each faculty member would also receive individual packets of those materials and all of the materials and publications developed by the Center for Career Development. Additionally, all new material is sent to each school, with notices to each faculty member as such material is developed.

A third initial contact strategy is more personal. In this strategy, a "career communicator" is chosen from the staff of a target school. The standard promotion material is sent to each school, and the career communicator has the responsibility for making initial contacts with principals and other staff. Career communicators are trained in CE concepts, materials, and activities. The fourth initial contact strategy uses the principal as the key figure. Again, all of the standard promotion material is sent to each school; but communication, promotion, and dissemination are carried out with the close cooperation of principals, who are given in-service workshops to assist them in their activities. The fifth initial contact strategy is a set of substrategies combining those specified above in various ways.

Staff Development Strategy--All activities concerned with familiarizing the staff with CE concepts and encouraging them to implement the use of CE resources fall under the staff development strategy. Such activities may include the distribution of self-contained printed materials on specific CE topics, workshops, scheduled weekly in-service short sessions, and in-service seminars with formal presentation of CE concepts and practices.

Promotional Resources Strategy--The promotional resources strategy uses all of the advertising media available to the Center for Career Development to disseminate CE information. The media include fliers, posters, bulletin board displays, portable displays, the district news letter and information sheet, slide-tape presentations, newspaper or television publicity, and use of community resources.

Contingency Management Strategy--The contingency management strategy focuses on techniques that may be used to stimulate the use of CE resources by teachers, administrators, and specialists. Reinforcers or rewards, such as honoraria, certificates, public announcements, salary or certificate renewal credit, and feedback, may be used for especially exemplary CE efforts.

Areas of Activity

General Description--The implementation plan was constructed on a foundation of extensive curriculum and guidance activities in career and vocational areas that had been implemented previously. The planning grant was used to coordinate the activities of the curriculum and guidance development groups so as to produce an articulated program. The guidance units, which were teacher-developed, were to be integrated into the curriculum. Some 40 state CE curriculum units and 18 CCEM units were used in the 1974-75 program. The project staff went into the schools to encourage the use of CE curriculum and guidance units. It was intended that all 1500 teachers in the district be influenced by the CE programs to some extent. The planning grant was also used to establish objectives, modify implementation strategies, and develop self-help strategies so that Career Education programs could continue even in the absence of help from outside the district.

It should be noted that the CE programs based on the plan prepared with NIE funds were not implemented until after the middle of the 1974-75 year, so that the questionnaire data are based on no more than two to three months' experience with the programs. It is also the case, however, that extensive CE activities, started before the planning period, were in progress during the year.

In view of the mid-year starting time for implementation of the program planned from NIE funds, it could not be expected that major curriculum modifications stemming from that plan would have taken place by the end of the year. However, some curriculum infusion and use of new CE materials had been undertaken at the beginning of the year and in previous years on the initiative of teachers with staff support so that questionnaires responses reflect those activities as well. Only 5% of teachers indicated that they were required to teach a specific number of CE hours, units, or activities. However, CE goals and objectives were presented and explained at training sessions or meetings, and printed lists were distributed.

There was no substantial development of new instructional materials during the implementation period, but previously developed materials were made available to teachers. In order of availability, these included lists of goals and objectives, curriculum guides, audio-visual products, catalogs of community speakers, and CE units other than CCEM. About 55% of teachers indicated that CE materials were available from a central location within their buildings, and more than one quarter (28%) said that 50 or more different items were in that location. Some 87% reported that less than ten different items had been placed in their individual classrooms, however.

The primary staff development or training modes were trips, visits, and demonstrations. About 74% of teachers reported having received CE training, and more than half of those had received training since June 1974 during the period of planning and implementation. Of those receiving

training during that period, 67% had five hours or less and 14% had 20 or more hours. The CE project staff conducted most of the training. Subjects most commonly covered in training included orientation to CE, goals and objectives, instructional materials, and community resources. Of those participating in training since June 1974, about 24% said they were required to do so. Most training took place after school and in the summer. About 40% reported that they had been given no training compensation, and 40% indicated that they had been paid per training session.

Teacher support was provided primarily by the CE project staff, who gave up to one hour per month, as reported by about half of the teachers. Smaller numbers of teachers reported support by media specialists, librarians, principals, and guidance counselors. The most common kinds of support were making arrangements for CE trips, locating and obtaining CE materials, and making arrangements for CE speakers.

With respect to community involvement, it had been developed over a substantial period of time, particularly through establishing cooperative relationships with business, industry, and government groups in the area. During the implementation year, about 35% of principals reported that they had provided information about CE to the community by speaking at meetings or submitting news items to newspapers, radio, or television. About 75% had spent less than one hour a month on such activities, however, and only 16% had set up advisory committees.

A plan for formal evaluation using experimental and control schools in a balanced design was prepared, but it was not implemented during the 1974-75 year because of the delay in starting the planned program and some related administrative difficulties in installing the program in the selected schools.

The NIE planning grant permitted the district to assign a number of individuals to the CE program as a primary responsibility, to delineate goals and objectives clearly, and to coordinate existing and newly planned programs into a coherent whole, based on those goals and objectives. Staff work appeared to be very effective, and there is every reason to think that CE is becoming an important part of System II's programs and that program development and refinement will continue.

District and School Administrative Staff--There is a high level of support for CE in the central administrative staff of the district, and a substantial amount of research and development talent and resources have been assigned to program development by the superintendent. Competition among programs for personnel and funding resources is always present, but the district commitment to CE suggests that the program will receive a fair share of those resources in forthcoming years. System II has also been successful in drawing on outside sources such as the state for additional support.

Principals' attitudes are highly favorable toward CE in general and toward the specific district programs that are being implemented. They see it as an important program and want it to continue and expand. More than half of the responding principals helped to review or critique program goals and objectives. Half received lists of goals and objectives, and half attended training sessions or meetings at which goals and objectives were discussed. The CE project staff provided primary support to principals during the 1974-75 year, mainly in areas of making arrangements for CE trips and speakers and in locating and obtaining instructional materials.

All of the principals had received CE training, with less than half receiving it since June 1974. In that period, about 43% had received less than 5 hours of training and 18% had received more than 20 hours. The most common forms of training were workshops, demonstrations, formal group discussions, and lectures. The CE project staff conducted most of the training. Less than one third of principals said that they had been required to participate in training. The most training attention was given to orientation to CE, goals and objectives, community resources, and instructional materials. Training activities took place during and after school and in the summer, and in almost all cases no extra compensation was provided.

The materials available to principals included lists of goals and objectives, curriculum guides, and CE units other than CCEM. Almost 80% said that materials were available in their buildings and in individual classrooms in their buildings, with 27% indicating that 50 or more different items were available from a central location in their buildings.

Outcomes

The following outcomes indicated by teacher questionnaire responses should be viewed as results of the entire CE thrust in the district, rather than simply that of the implementation planned during the NIE grant period because the latter had been in effect for too short a time to show separate effects:

- Of the 539 teachers surveyed, only 105 (19%) said that they had no role in the CE program.
- About 52% of the teachers indicated that they taught less than one hour of CE per week, and 14% more taught no CE. Five or more hours were taught by 6% of the teachers, and 28% taught from 1 to 4 hours per week.
- In regard to the estimated benefits of CE instruction, 18% of teachers felt that very few were benefiting, and 2% that none were benefiting. About 64% felt that most or almost all of their students were experiencing beneficial results from the instruction.

- The most-used instructional materials were curriculum guides, catalogs of community trips, audio-visual products, lists of goals and objectives, and CE units other than CCEM.
- The most common roles in the program were using community speakers in classroom instruction, taking students on trips to job sites, and teaching career education lessons. Non-CCEM units were used more in instruction than were CCEM units.

Principal reponses indicate the following outcomes relative to student learning and classroom teaching:

- About 54% of principals felt that the CE program was beneficial to most or almost all of the students in their schools. About 67% indicated that half or more of the students accomplished the goals and objectives of CE. Only 7% felt that few of the students benefited from the program.
- More than 39% of principals stated that 50% or more of their students were participating in CE programs; 54% indicated a participation level of between 25% and 49%.
- More than 42% said that 50% or more of their teachers were making special efforts to teach CE in their classrooms.

Discussion and Comment

The success or failure of implementation is related to a number of factors about which insights were obtained in questionnaires and interviews. As previously noted, the climate for the adoption of CE programs is very favorable. The superintendent and district staff support the program, and very effective staff effort has been devoted to creating CE concepts and activities that can be installed in the schools at all levels with the likelihood of positive outcomes. Only 19% of the 539 teachers surveyed said that they had no role in the CE program. Some 52% indicated that they taught less than 1 hour a week and 14% taught no CE. More than 28%, however, taught from 1 to 4 hours per week, and 6% taught more than 5 hours. There was a limited amount of training during the 1974-75 year, but most principals and teachers had received training previously. Materials support was substantial. About 64% of teachers felt that most or all of their students benefited from CE instruction, and only 2% saw it as having no benefits.

About 71% of teachers had had previous CE experience in using CE materials or curriculum development. Some 53% reported no previous involvement in CE planning, and 4% had had a lot. Only 10% stated that they were unfamiliar with CE goals and objectives; about 60% said that the goals and objectives fitted well or very well with their curricula; and only 18% felt that it was not important for students to achieve the goals and objectives. About 44% of principals said that they had had some involvement in CE planning in the school system, and 15% had had a

lot of involvement. A further positive factor in implementation is the fact that only 4% of principals said that they were not at all familiar with CE goals and objectives, and a substantial 78% stated that they were either very familiar or quite familiar with them. Almost all felt that the goals and objectives had been useful in helping others to understand CE and in helping them to understand their roles in the program. More than 82% felt that the goals and objectives fitted well with their curricula, and only 7% felt that it was not important for students to reach the goals and objectives.

Both teachers and principals saw other interest groups such as parents, the superintendent and his staff, and community organizations as being highly favorable toward CE and regarding it as important. They also felt that the same groups would support curriculum change, and teachers felt that they were free to change within their own classrooms. Teacher-initiated change would be facilitated by the fact that almost all principals agreed that teachers were free to initiate change in their instruction.

It is probable that one of the most important factors in successful implementation is training. About 32% of the teachers felt that they had received too little training, and 32% felt that the training was not appropriate to their teaching activities. In addition, some 58% would have preferred training in areas other than CE, and 43% said that training had little or no influence on the extent to which they incorporated CE in their teaching. About 23% of principals felt that they had received too little training, but more than 92% thought it was appropriate to their activities. However, some 72% would have preferred training in areas other than CE. Almost 86% indicated that training had influenced the incorporation of CE into the curriculum.

About one-fourth (26%) of teachers were uncertain of their roles in CE, but only 12% of principals indicated such uncertainty. Only one principal said he had no role in the program. The most help in understanding roles for principals came from individual meetings with the project staff and for teachers from group sessions. Teachers indicated that the least help came from principals.

The availability of good materials may contribute substantially to implementation success. Teachers stated that materials were adequate in quality (78%) and quantity (77%). Sources of CE materials in order of most frequent mention were CCEM, other staff within the school system, and the teacher's own development.

Another important factor in implementation is staff support. About 82% of teachers felt that the support they received was appropriate to their needs, and only 19% that it was not adequate. Support was adjudged easy to obtain by 85%. Almost all principals felt that staff support was appropriate to their needs and that it was easy to obtain. About 18% indicated, however, that more support was needed.

With respect to the particular programs with which they were involved, some 43% of teachers judged them to be satisfactory and 31% not satisfactory. Some 16% thought that the CE program should not be continued the next year, and 26% indicated that it was suited only to a small number of students. CE was regarded by 33% as not being an important element in their teaching, and 50% felt that other programs were more important. Principals were more favorably disposed than teachers to the CE program. About 78% saw it as being very satisfactory, and only 4% thought that it should not be continued the next year. None of the principals thought the program was suited to only a small number of students. About 82% agreed that CE was an important part of their programs, but 54% thought that many other programs are more important. Some 54% of principals expected the program to remain the same in the coming year, and 32% expected it to be expanded.

The combination of a very favorable climate for CE, a talented staff with good CE backgrounds, and a willingness to commit resources to the careful development of CE programs including evaluation suggests that CE programs will flourish in System II. There are some problems both with respect to training and materials, but none are so serious that they cannot be overcome.

System III

Schools

More than 90,000 students were enrolled in System III public schools during the 1974-75 year, with about 82% black and the remainder white. There are 23 high schools, one area technical school, 8 junior high or middle schools, and 111 elementary schools and preschools.

About 40% of graduates enter two-year or four-year colleges, and another 12% enroll in vocational or other schools.

Career Education History Before CCEM

The development of the System III city as a commercial and industrial center was accompanied by a need for trained personnel in a great many fields. Unemployment rates were relatively low compared to some other parts of the country, but the rates for recent graduates of System III were about twice the general rate. It was in the interest both of the community and the school district to develop programs to provide vocational training for personnel to fill the needs of the employers and to reduce the unemployment rate. Long before the inception of CCEM, the school district and the business community had cooperated in developing a variety of vocationally oriented programs.

The CCEM development project provided further impetus for the development of CE programs, carrying career-related activities into all grade levels including primary and intermediate. Large numbers of teachers and other staff members were involved in curriculum development. The activity was capped by the formation of a permanent Division of Career Education headed by an assistant superintendent in the Fall of 1973. The new division encompassed the following programs: Distributive Education and diversified Cooperative Training; Neighborhood Youth Corps; Vocational Office Training and Business Education; Industrial Arts; Trade and Industrial Education; Home Economics (general and vocational); PECE and CVAE; Placement Services; and Maintenance of Vocational Instructional Equipment and Supplies. Additional division responsibilities included the administrative supervision of the Area Technical School, the Metro Skills Center, the Adult Career Education Center; and the Department of Career Service, including Career Education Planning and Career Guidance. The division budget for 1974-75 was $8,310,880 (about 8% of the total school budget), indicating a substantial district commitment to the CE activities. An additional indication of such commitment was the provision of funding in other divisions for career-related activities and the Board of Education mandate that all students graduating after June 1977 should have 30 hours of instruction in no more than two skill areas as a graduation requirement. Planning for implementation of CE programs in 1974-75 was carried out by a project team in the Career Education Division, with full administrative support from that division.

Implementation Plan for 1974-75

The planning grant provided for creating a coordinated program and for a number of in-service training workshops for teachers. The availability of CCEM materials was also helpful in getting Career Education into the curriculum. Elementary CCEM materials were provided to all K-8 schools. Members of the planning staff met with teachers in each of the schools to discuss the use of the materials as classroom resources. Procedures, references, and aids were provided to each school as well. The plan called for the use of 29 CCEM units and 37 other CE units in the elementary schools. It was also planned that each classroom have one community resource person to aid with ongoing programs involving community organizations. Approximately 3,100 teachers were reached through the Career Education program in the K-8 schools.

Project Characteristics During 1974-75

The activities of the planning project team were carefully articulated with full coordination both within the Career Education Division and in the district staff as a whole. Guiding decisions as to major CE objectives and events were made by line administrators. Implementing decisions as to how the objectives were to be reached and the events carried out were made by staff and teacher coordinators. Close liaison was maintained with students, parents, community groups, school staffs, and business and labor representatives throughout the planning process.

As was the case with other participating districts, the plan was based on developing cooperative and supportive relationships with teachers and principals, because it was felt that successful implementation could only come about through voluntary adoption of the use of CE materials and procedures by these individuals. There were no coercive requirements to use materials or to alter curriculum. Information about CE was presented to school personnel, government agencies, and private industry and business in an effort to stimulate interest and commitment. Teacher workshops were conducted. Resource information was provided to schools along with suggested ways of using such material to carry out CE programs. Planning involved as much direct personal contact with schools as possible, and appropriate personnel in each school were asked to develop plans for the coming year. The plans were submitted to the project team and used as a basis for preparing statements indicating the level of activities to be expected and their configuration. To the extent possible, the plans were discussed with the school personnel who prepared them, and support for implementing them was provided. The major emphasis throughout was on providing information to teachers who were to develop their own programs.

As summarized, the plans submitted by individual schools showed what materials were to be used and what activities were to be carried out in the 1974-75 school year, and they provided a basis for later evaluation, indicating the extent to which the planned programs had been implemented.

At the conclusion of the planning period, the planning project team was reassigned, some within the CE division and others outside it. Thus, there was no longer any direct responsibility on the district staff for carrying out the plans.

Areas of Activity

General Description--System III has a Career Education Division with a substantial budget. The planning project staff joined with other members of the division staff in planning and providing services to school staff and faculty. The staff had planned and carried out several workshops, had distributed materials (CCEM and others), and had visited schools to discuss the Career Education program with teachers and principals. Decisions as to what kinds of programs would be implemented and what materials would be used were left to the schools, with the staff providing advice and consultation. As indicated by questionnaire responses, CE goals and objectives were presented and explained at a training session or meeting, and printed lists of goals and objectives were distributed.

There is little evidence that major curriculum modifications were made, and the only new requirement placed on the schools by the board was that all graduates must have completed at least 30 hours of Career Education instruction. Almost 90% of the teachers indicated that they were not required to teach a specific number of hours, units, or activities of CE.

Little development of new instructional materials took place, but teachers were given an opportunity to select from CCEM and other materials made available to them in planning their instruction. Questionnaire responses indicated that the most available instructional materials were lists of goals and objectives, curriculum guides, and audio-visual products. About 40% of teachers reported that CE materials were available from central locations within their buildings. Some 58% reported that less than 10 such items were in those building locations. About 90% indicated that less than 10 items were available in their individual classrooms.

Staff development consisted of workshops and face-to-face help to individual faculty members. Only about 37% of teachers received CE training at one time or another. Of these, about half had received such training since June 1974, which was the period of active implementation. In the group of post-June 1974 trainees, about 56% had received 5 hours or less, and 11% had 20 or more hours. The common modes of training were workshops, demonstrations, and lectures. Training was most often conducted by the CE project staff. Major training attention was given to orientation to CE, goals and objectives, information about the world of work, and instructional materials. Of those participating in training since June 1974, about 30% said that they were required to participate. Most training took place during or after school, and most teachers said they received no extra compensation for it.

Primary sources of CE support for teachers were librarians, other teachers, principals, and CE project staff members, providing up to 4 hours per month of support. Assistance was provided most commonly in locating and obtaining CE materials, making arrangements for CE speakers, and helping teachers to develop CE materials.

The well-established programs of community involvement, particularly with business and industry using trips and invited speakers, continued at a high level during the year.

There were no significant special projects in the CE area that were introduced during 1974-75, but the overall program continued to expand and develop.

After unsuccessful attempts to obtain outside funding for enhancing placement activities, a counselor in each high school was given responsiblity for placement. CE programs were not formally evaluated.

The NIE planning grant did permit giving special attention to planning for curriculum change, but it is difficult to assess its influence fully, because the activity became a part of a large, ongoing CE program that had been under development and implementation for a number of years.

It may be anticipated that Career Education will continue to be a major thrust in System III. The setting up of a CE division under an assistant superintendent and with a substantial budget in a time of financial retrenchment indicates a strong committment to the concept. Efforts to persuade teachers to include career concepts in their instruction and to use CE curriculum materials will continue with advice and assistance from personnel of the CE division. The mandate for 30 hours of instruction for every graduate will ensure program development in secondary schools.

District and School Administrative Staff--District-level support for CE is maintained at a high level through the CE division. The establishment of the division formalizes a long-existing committment to maintaining a close relationship between education and work. Division staff members are experienced and trained in developing and administering CE programs and will provide the necessary support for program development at the school level.

System III school principals appear to be positive and accepting of CE. They see it as important and expect and want CE programs to continue. Principal questionnaire responses indicate that four of the 26 respondent principals helped to review or critique program goals and objectives, and 10 helped to create or select them. Eleven received printed lists of goals and objectives, and eleven had them explained at a training session or meeting. It is difficult to assess the level of active support for CE among principals, but within the boundaries of competing programs and limited resources, most appear to be willing to have programs carried

out in their schools. In this kind of situation, it is important that the staff of the CE division provide advocacy, support, and assistance. The CE project staff provided most of that support, and it was primarily in the areas of locating and obtaining CE materials and helping teachers to develop CE materials.

Additional help was received through training. About 77% of the respondent principals reported that they had received CE training with no more than 35% of that group having received it after June 1974, which was chosen as the beginning of the implementation period. Half of the group receiving training after June 1974 had less than 5 hours, and 15% had more than 20 hours. The most common forms of training were lectures, workshops, and demonstrations. Training was conducted primarily by the CE project staff. No principals were required to participate in training. Major training attention was given to orientation to CE, goals and objectives, information about the world of work, and understanding CE roles. Most training was conducted during school hours, and there was no extra compensation for it.

Principals had materials available to them. Most available were lists of goals and objectives, catalogs of community speakers, audio-visual products, and curriculum guides. About 62% said that materials were available within their buildings. About 35% indicated that less than 10 items were available in their buildings, and 20% that more than 50 could be found there.

Outcomes

Because program implementation in 1974-75 was a continuation and expansion of programs, many of which had been in existence for a good many years, it is difficult to assess the effects of the implementation as distinct from what would have occurred in the absence of the NIE planning grant. Data gathered near the end of that school year indicate certain CE outcomes with respect to classroom activities and practices and indirectly with respect to student learning.

Outcomes of the implementation process in System III as indicated by questionnaire responses of teachers include the following:

- Among 434 teacher respondents, 188 (43%) classified themselves as having no role in the CE program.
- Among those indicating a role in CE, 36% said that they taught CE for less than 1 hour per week, and 18% indicated that they did not teach it at all. About 8% indicated that they taught more than 5 hours per week, and 39% taught 1 to 4 hours.
- With respect to beneficial effects on students, 5% of teachers having a role in the program indicated that their students were receiving no benefits and 11% that few of their students were benefiting. About 70% felt that most or almost all of their students were getting beneficial results from the instruction.

- The most-used instructional materials were lists of goals and objectives, curriculum guides, audio-visual products, and books, games, and student materials.
- Most common roles in the program were taking students on trips to job sites, using community speakers in classroom instruction, teaching lessons other than CCEM, and developing CE instructional materials.

The following outcomes are indicated by principal questionnaires from 26 of the 40 randomly selected principals surveyed:

- About 60% of the principals felt that most or almost all of the students in their schools benefited from CE instruction. About 63% felt that at least 50% of the students in CE were accomplishing its goals and objectives. Some 16% felt that few or none of their students benefited from CE instruction
- With respect to student participation in CE programs, about half of the principals indicated that at least half their students were participating. About 15% indicated that less than 25% of students were in the program.
- About 44% of principals indicated that more than 50% of their teachers were making special efforts to teach CE in their classrooms. About 20% indicated that less than 25% were doing so.

Discussion and Comment

In view of the committment of the Board of Education and school administration to CE, it appears likely that the programs will continue and expand in System III. Limitations concern budgetary and other resource, but CE will probably get a larger share of those resources in the future, although the program may develop slowly. The primary problem is infusion into the curriculum, and the previously specified outcomes suggest that the process may be a relatively slow one. A substantial proportion of respondent teachers (43%) indicated that they had no role in the CE program, and more than half indicated that less than 1 hour a week of instruction was carried out in the classrooms. The number of classroom hours per week taught by those remaining might be regarded as small, but an effort, at least, is being made. Little training, but substantial materials support, is being provided. In any case, a substantial proportion of teachers feel that the program is beneficial to most of their students, and only a few see no benefits in it.

Most teachers had positive attitudes toward CE. However, only 29% had had previous CE experience, largely in using materials and curriculum development, and about 59% had had no CE planning involvement. Some 34% stated that they were not at all familiar with CE goals and objectives, and another 13% indicated that they were not very familiar with them.

Some 73% stated that goals and objectives fitted well with their curricula, and only 5% felt that it was not important at all or not very important that their students achieve the CE goals and objectives. Adding to the favorable climate was the fact that only 18% of the respondent principals had had no involvement in CE planning and 25% had had a lot of involvement. Almost 93% of principals were familiar with goals and objectives, and almost all felt that they were useful and fitted well with their curricula, and that it was important for students to achieve the goals.

Both teachers and principals perceived attitudes toward CE to be highly favorable, estimating that very few in any interest group regard it as unimportant. They felt that most groups would support curriculum change, and 76% of teachers felt that they were free to select or modify programs within their own classrooms. This last is quite important, because it appears that the impetus for curriculum change must come from teachers, but only 40% of principals feel that teachers are free to change and the disparity may present some implementation difficulties.

Training is usually regarded as an important factor in successful program implementation. Only about 21% of System III teachers felt that the CE training they had received was not appropriate to their teaching activities, but 64% felt that they had not received enough training. Their attitudes toward receiving training were favorable, but 52% would have preferred some kind of training other than CE, and 21% said that training had little or no influence on their teaching. Among principals, 37% felt that they had received too little training, but 80% felt that the training was appropriate to their activities, although 60% would have preferred training programs other than CE. Only 11% of principals indicated that training had had little influence on incorporation of CE into the curriculum.

Only 19% of teachers were uncertain of their roles in CE and 10% of the role of principals. The most help in understanding roles had been provided by the CE staff.

Availability of good materials is another significant factor in implementation. Materials provided to teachers were felt to be adequate in quality (69%) and quantity (48%). The sources of CE materials in order of most frequent mention were teachers' own development, CCEM, and commercial development.

In the area of staff support, about 69% of teachers felt that what they had received was appropriate to their needs, but 43% felt that it was not adequate. Some 74% felt that support was easy to obtain. For principals, 17% felt that support was not appropriate to their needs, and 30% indicated that it was not sufficient. However, 91% found support easy to obtain.

In a general sense, both teachers and principals regarded CE as being important and worthwhile, but only 35% of teachers found the particular program being implemented to be satisfactory, and 25% felt that it was not satisfactory. Only 4% indicated that the program should not be continued, however, and 20% that it was suited only to a small number of students. CE was regarded as not being an important element in their teaching by 31% of the teachers, and 24% felt that other programs were more important. The level of satisfaction of principals with the program differed somewhat from that of teachers, with 69% indicating that the program seemed very satisfactory, and only 4% feeling that it should not be continued next year. Some 92% indicated that CE is an important element of their programs, but 36% felt that other programs are more important. Half of the principals expected the CE program to be expanded in the following year, and half expected it to remain the same.

Attitudes of all interested groups in System III toward CE are positive, and materials and a limited amount of training have been provided. Limitations on financial and other resources may make for slow development and limited progress in curriculum change reflecting CE inputs, but there is every reason to think that the program will be continued and expanded. Because it started from a large, solid base of vocational and CE programs developed over a period of many years, the ultimate outcome should be satisfactory to all concerned.

System IV

Schools

A little more than 20,000 students are enrolled in System IV schools, with about 40% black and most of the remainder white. There are two high schools, six junior high schools, and 22 elementary schools. The staff is composed of 1,217 teachers, about 29% of whom are black.

There is no division into courses of study such as college preparatory, general, or vocational. Some 55% of students seek immediate employment upon graduation, 10% go to business or trade schools, and the remaining 35% enroll in two-year or four-year colleges.

Career Education History Before CCEM

Since the end of World War II, System IV had followed a national trend of emphasizing academic and college preparatory programs, with only limited attention to vocational or career-related programs. Because only 35% of graduates enrolled in college, this emphasis seemed disproportionate. In the years immediately prior to the inception of CCEM, however, some steps had been taken to shift that emphasis. A major factor in the shift was the opening of a Vocational Education Center, comprising an area vocational school through which the occupational training opportunities of high school students were expanded substantially. There were, in addition, a number of career-related programs sponsored either by the school district or the county and federally funded in the main. These included the Career Opportunity Program, Career Development Program, Individualized Instruction Program for Dropouts, Schools Training Resources, Secondary Counseling Program, Adult Education Program, and the Street Academy. Adult Education programs had had especially rapid growth and provided service to more than 6,000 students each year.

In 1965, the Community Action Program Office was founded to apply for and monitor specially funded programs, some of which had career orientations.

The desegregation controversy in the early 1970s provided further impetus for examination of the schools and the relevance of their programs. School counselors in their recommendations for the use of ESEA funds in 1970 suggested a number of areas needing more attention and support, including reduction in the dropout rate, guidance services, skill training and job placement, and vocational counseling. To this point, as in most school districts, there had been little or no emphasis on introducing career concepts in primary and intermediate schools. Finally, a school reorganization undertaken primarily for desegregation provided opportunities for instructional and curricular changes as well. In particular, the junior high schools were converted to single grade levels, reducing diversity in individual school buildings and making for more effective implementation of change.

During the period of CCEM development, a maximum of 24 full-time professionals were involved in the program. All schools and 90% of elementary students participated in one way or another. More than half of the teachers and all of the central office staff, principals, and guidance counselors were trained or oriented during this period as well. Materials development, staff training, and materials testing were the major activities.

Implementation Plan for 1974-75

The primary emphasis in the System IV program was the distribution and use of Career Education materials in K-6 schools. CCEM units were distributed to these schools with the anticipation that they would be used as a curriculum resource and supplement. One teacher in each building was designated as a Career Education specialist and given special training. Two elementary guidance counselors had been available in the district, but they would have been discontinued or reassigned for budgetary reasons without the planning grant. They were continued and functioned as planners during the grant period. Four additional Career Education coordinators were assigned to provide consultant services and materials to all schools. They were given special training in career counseling. The planning grant also made possible the coordination of existing Career Education programs with one another and with the new materials distribution and use program. About 200 teachers in 23 schools and 3,000 students were involved in Career Education programs.

Project Characteristics During 1974-75

As of June 1974 (at mid-point in the project planning period), broad CE goals had been established, but there was only a start in achieving those objectives. There were great variations from school to school and from teacher to teacher in the degree of commitment to learning alternatives, use of resources outside the classroom, and instruction related to life roles. Resources available included about 100 CCEM units, 60 community resource persons, and two CE resource teachers. There was greater acceptance of and implementation of use of materials at the elementary level than at the secondary level. Group guidance activities emphasizing life roles had been expanded. More specifically oriented vocational programs were being continued and expanded in secondary schools. They included a work-experience program (the Student-Adult Learning System), a work-study program, and Cooperative Occupational Training. The Director of Vocational Education was responsible for the CE program.

The implementation planning activity consisted largely of meeting with a variety of interest groups both within the school system and outside it in the community, and conducting a survey to determine areas of greatest CE need. Project team members made a variety of presentations to various groups to encourage use of CE materials and to explain CE concepts. During the planning period, substantial numbers of CE units

were in use, particularly in elementary schools. The failure of a millage election made it difficult to plan and carry out anything more than a minimal maintenance of ongoing efforts with regard to implementation. There were no new initiatives, and project team members were reassigned before the beginning of the 1974-75 school year, so that there was no longer any separate responsibility for CE in the district. The primary impetus for CE in System IV has always come from special projects. In their absence, its further development will depend on levels of commitment to the concept among teachers and administrators. Special projects provided training and experience in materials development and use, which are positive factors. The Board of Education has adopted CE as a major goal, and the state has mandated the development of CE programs in all schools. Competition for resources is and will continue to be a major problem in development of CE or any other new or special programs.

Areas of Activity

General Description--As noted above, the program focused on distribution and use of CE materials in K-6 schools. CCEM units were distributed with the anticipation that they would be used as a curriculum resource and supplement. One teacher in each building was designated as a CE specialist and given some special training. The planning grant provided for the continuing services of two elementary guidance counselors whose work would have been discontinued without it. Members of the CE project staff had been reassigned by the beginning of the 1974-75 school year, and there were budgetary problems that limited the number and kind of implementation activities to be undertaken. The initiative of teachers and principals was required to develop CE programs in individual schools, and there were no requirements as to numbers of hours or kinds of activities to be carried out. Teacher questionnaires indicated that CE goals and objectives were presented and explained at a training session or meeting, and printed lists of these were distributed.

Evidence of major or even moderate curriculum modifications is lacking. None of the respondent teachers indicated that they were required to teach a specific number of CE hours, units, or activities.

There was little development of new instructional materials, but CCEM materials were made available. Next in order of availability were lists of goals and objectives, curriculum guides, and audiovisual products. Only 21% of teachers reported that CE materials were available from a central location within their buildings, and less than 17% indicated that 50 or more different items were in that location. Some 89% reported that less than 10 different items had been placed in their individual classrooms.

Staff development consisted of workshops. Almost 72% of teachers reported receiving CE training at one time or another, but no more than 30% of these had received it since June 1974, which was the period of active implementation. In the group receiving training since June 1974,

74% had had 5 hours or less and only 5% had 20 or more hours. Training was most often conducted by the CE project staff. Training attention focused on orientation to CE, goals and objectives, instructional materials, community resources, and CCEM. In the group participating in training since June 1974, only 6% stated that they were required to do so. Most training took place in the summer or during school hours. Some were paid for each session, some received released time, and some got no extra compensation.

With respect to CE support for teachers, the primary source was CE project staff members, providing about one hour per month of assistance. Librarians also provided assistance. The most common kinds of support were locating and obtaining CE materials and making arrangements for trips and speakers.

There was very little community involvement. About 87% of principals reported that they had not provided any CE information to community groups during the year; involvement in engaging the interest and support of parents and other community groups in CE was less than one hour per month. No advisory committees had been set up.

No significant special CE projects were introduced during the 1974-75 year, although existing vocational programs were continued and expanded slightly. Formal evaluation of CE programs was not undertaken.

The NIE planning grant permitted the assignment of a few individuals to CE development for a period of time, but budgetary problems in the district limited implementation activities markedly. A state mandate to develop CE programs now exists, and program development will continue. However, as noted above, the CE project staff was disbanded at the beginning of the 1974-75 year; in view of financial limitations, it seems unlikely that any extraordinary efforts in the CE area will be undertaken.

District and School Administrative Staff--The school system administrative staff is supportive of CE, but resource limitations reduce capability to do much more than provide some additional materials for teachers to use and coordinate existing programs. CE has no special representation on the district staff, and it seems unlikely that very much specific line-item funding will be provided beyond that necessary to meet state-mandated requirements.

As is the case in most other school districts, principals appear to approve of and accept CE concepts. They regard CE as important and want and expect it to continue. Questionnaire responses from 15 principals indicate that about 13% of principals helped to review or critique program goals and objectives, and one helped to create them. Three received lists of the goals and objectives, and ten attended training sessions or meetings at which goals and objectives were discussed. In view of competition for time and resources of other programs, it seems unlikely that

System IV principals will make extraordinary efforts in the CE area, even though they approve and support such instruction. Central staff advocacy is important, and it will be lacking because there are no central staff members whose primary function is to develop CE programs. During the 1974-75 year, primary support was provided by that staff in the areas of making arrangements for speakers and trips, obtaining CE materials, and helping teachers to develop CE materials.

About 75% of principals had received CE training at some time, but almost all got it before June 1974, and few who were trained after that time had less than 5 hours. Lectures, workshops, demonstrations, and formal group discussions constituted the most common forms of training. It was conducted primarily by the CE project staff. No principals had been required to participate in training since June 1974. Training sessions were devoted to understanding CE roles, orientation, curriculum development, goals and objectives, community resources, and CCEM. Training took place during and after school and in the summer, and no extra compensation was provided.

Materials available to principals were lists of goals and objectives, curriculum guides, and CCEM units. Some 50% said materials were available in their buildings, and 9% indicated that 50 or more items were placed there.

Outcomes

For reasons previously stated, the amount of active program implementation in System IV was limited. A substantial number of K-6 teachers did make efforts to incorporate CE concepts in their instruction, however, and some outcomes were indicated in questionnaire repsonses. They are as follows:

- Of the 97 teachers surveyed, only 25 indicated themselves as having no role in the CE program.
- Among the respondents 65% taught less than 1 hour of CE per week and 16% taught none. Five or more hours per week were taught by 6% of the teachers, and 14% taught 1 to 4 hours per week.
- With respect to the estimated benefits of CE instruction to students, 15% of teachers felt that very few were benefiting and 0% that none were benefiting. About 69% felt that most or almost all of their students were getting beneficial results from the instruction.
- The most used instructional materials were CCEM units, lists of goals and objectives, curriculum guides, and audio-visual products.
- The most common roles in the program were using community speakers in classroom instruction and teaching CCEM units. Only 14% were uncertain of roles.

From the responses of principals, the following indications of outcomes related to student learning and classroom teaching were obtained:

- Some 40% of principals felt that most or almost all the students in their schools benefited from CE instruction; 69% felt that half or less of their students accomplished its goals and objectives. About 40% felt that few benefited.
- None of the principals indicated that more than 50% of their students were participating in CE programs.
- None of the principals indicated that more than 50% of their teachers were making special efforts to teach CE in their classrooms.

Discussion and Comment

Both the moderate commitment to CE of the Board of Education and school district administration and, more importantly, the system's limited resources tended to result in few program implementation activities and in minimal outcomes. Questionnaire responses indicated a number of possible background or explanatory factors that may help to account for the relatively small program impact. Although only about 25% of teachers indicated themselves as having no role in the CE program, some 65% taught less than 1 hour per week and 16% taught none. Both training and materials support were quite limited during the implementation year, and the implementation plan did not call for any great amount of activity in either area. Most teachers felt, however, that the program was beneficial to most of the students who received it, and none saw it as having no benefits.

Teachers were positively oriented toward CE. Some 70% had had previous CE experience in testing or using materials or both. About 67% had had no CE planning involvement, and only 4% had had a lot. A substantial 33% stated that they were unfamiliar with CE goals and objectives, but among those who were familiar with them, some 75% said that they fitted well with their curricula, and only 10% felt that it was not important for students to achieve the goals and objectives. A favorable indicator was that 74% of principals had had special involvement in CE prior to the 1974-75 school year in curriculum development, testing, or use, or in advisory roles. Further, only 7% of principals stated that they were not familiar with CE goals and objectives, and a similar number felt that they had not been useful. Some 64% of principals felt that the goals and objectives fitted well with their curricula, but only 43% felt that it was important that students achieve the goals.

Teachers and principals both saw other interest groups, such as parents, as being highly favorable in attitudes toward CE and regarding it as important. Most groups were seen favorably disposed toward curriculum change, and 73% of teachers felt that they were free to change within their own classrooms. Principals agreed with respect to such freedom, which is a favorable indication for teacher-initiated change.

Successful implementation is highly dependent on training. About 59% of System IV K-6 teachers felt that they had not received enough training, but only 20% reported that it was not appropriate to their teaching activities. Although they were generally favorably disposed toward the training they had received, some 54% would have preferred some kind of training other than CE; 26% said that training had little or no influence on their teaching. About half of the principals felt that they had received too little training. Some 66% agreed that the training was appropriate to their activities, but half would have preferred training in programs other than CE. About 67% felt that training had had some or great influence in determining the extent to which CE was incorporated into their schools' curricula.

Only 14% of teachers were uncertain of their roles in CE, but 33% of principals felt uncertain. In both cases, the most help in understanding roles had come from the group training sessions, CE project staff, and printed materials. For teachers the least help in role definition had come from principals.

The availability of good materials is thought to be another important factor in implementation. System IV teachers felt that materials available to them were adequate in quality (90%) and quantity (77%). The materials sources most frequently mentioned were CCEM, teachers' own development, and commercial development.

With respect to staff support, about 83% of teachers felt that what they had received was appropriate to their needs and only 31% that it was not adequate. Support was felt to be easy to obtain by about 84%. For principals, about 73% felt that staff support was appropriate to their needs, 67% that they had received enough support, and 73% that it was easy to obtain.

Both teachers and principals generally regard CE as being important and worthwhile, but only 36% of teachers found the particular program in which they were involved to be satisfactory; 30% said it was not satisfactory. Only 3% indicated that it should not be continued, however, and only 14% that it was only suited to a small number of students. As regards importance in their teaching, 29% regarded CE as not being an important element, and 45% felt that other programs were more important. Principals' attitudes were similar to those of teachers, with 27% seeing the program as very satisfactory and 93% feeling that it should be continued in the next year. Only 20% of principals saw CE as being suited only to a small proportion of students. Almost 60% indicated that it was an important part of their programs, but 47% thought that many other programs are more important. About 21% of principals expected the program to be expanded in the next year, and half expected it to remain the same.

For a variety of reasons, there was no great amount of CE program implementation in System IV, except for the distribution of materials, which is about all that the implementation plan called for. Attitudes are generally favorable, but there is severe competition for resources.

It seems unlikely that development will be rapid or extensive unless motivations and funding are increased substantially. Some teachers will infuse CE concepts in their instruction, but the curriculum will not be strikingly different from that that existed prior to the implementation year.

System V

Schools

System V enrolls about 625,000 students; about 40% are white, 25% are black, 25% are Spanish-surname, and 10% are other minorities. The students attend approximately 435 elementary schools, 75 junior high schools, 55 senior high schools, and 20 special schools.

The school district employs over 37,000 full-time certificated teachers, administrators, counselors, librarians and other specialists. The great majority of the staff are white--over 70%--about 15% are black, and about 10% are Spanish-surname and/or oriental. The staff is unusually mature, with a heavy majority over 40 years of age.

System V has an understandable concern with career preparation for its high school students. About 25% drop out before graduating from high school and should have learned salable skills before leaving. In addition, 25% of the graduates look for jobs immediately following commencement exercises. Another 30% enter two-year colleges, many to get occupational training, and they take jobs within two years. Only about 30% of the graduates enter four-year colleges.

Despite the need for occupational training during high school, System V has not chosen to establish specialized vocational high schools. Moreover, only 5% of its high school students are enrolled in vocational curricula. Most of the students who will go to work immediately after graduation are among the 32% enrolled in the general high school curriculum. This means that System V must find some way of arranging for occupational orientation and training for about half of its students even though it does not have the specialized in-school facilities for doing so.

Career Education History Before CCEM

Before CCEM came to System V, the term "Career Education" was virtually equivalent to "vocational education." That is, it meant career preparation--specific job training--rather than career awareness or career exploration. Virtually all of the pre-CCEM Career Education programs in System V were senior high vocational training and junior high prevocational training and guidance courses. The senior high offerings were exploratory only in the sense that they were easy-entry and easy-exit and did not require irrevocable career decisions. The junior high courses were exploratory only in the sense that they sampled the several traditional vocational areas of the high school curriculum. Little if anything was done to create an awareness of career possibilities among elementary school students.

The school officials in recounting major pre-CCEM events in the evolution of career education single out a number of distinctive programs, all of them for high school students. There is virtually nothing in the

history about career education below the high school level. What System V saw in CCEM was the possibility of extending career concerns downward through the junior high schools into the elementary schools. The CCEM project made an attempt to do exactly that, as explained in the next section. But when CCEM was over in June of 1973, System V's deep concern about salable job skills for its high school graduates still dominated its thinking about career education.

Implementation Planning During 1974-75

When the Career Education Planning Unit, headed by the former CCEM project director, began its activities, System V was going through a period of extreme economic difficulty, learning to live with a decentralized administrative system, coping with demands for community control, struggling against increasing teacher power, and trying to understand and suppress student violence and vandalism.

Economic Trouble--With a new law freezing state financial aid for each student and with declining enrollments so that there were fewer and fewer students for whom to collect state aid, System V school officials faced two equally unacceptable choices. The first was to cut the school program, a move certain to be opposed by the teachers' union and by militant community groups. The second was to raise school taxes, something they had not been able to accomplish since 1957. The Board of Education took the second unpleasant choice, mounted a major campaign to get votes, promised to upgrade school quality, and tightened school discipline. The Board of Education won in a squeaker: 50.46% yes and 49.54% no. The vote was not taken until June 1974, which meant that the Career Education Planning Unit had to do its thinking and much of its salesmanship for 1974-75--the year in which its plan was to be implemented--in the 1973-74 atmosphere of uncertainty and even gloom.

Decentralization--As with most major cities, System V decided (in 1971) to divide itself into administrative areas (12 of them), each headed by an area superintendent. Area administrators were given a considerable budget of power to make the new plan authentic: a decentralized structure would mean little if power were not decentralized with it. The plan was two years old in 1973-74.

Decentralization had been in large part a move to increase community control. A 55% minority population had charged the Board of Education and its central administrative office with being unaware of and unresponsive to community needs. Creating 12 administrative areas did not necessarily make parents and community spokesmen feel that their concerns were automatically represented in the area offices. They continued to speak for themselves in 1973-74, expressing strong preferences about what the schools should do, especially because of an extremely tight budget, which meant that some programs had to be abandoned to make ends meet.

Administrative Placement of Career Education Planning Unit--The CCEM project director came originally (before CCEM) from the Division of Career and Continuing Education (vocational and adult education). But the CCEM project was not placed in that division. Instead, in keeping with the spirit of Career Education as being more than vocational education, CCEM was assigned to the Division of Instructional Planning (curriculum and instruction). The Career Education Planning Unit continued in that division, in keeping with its function of infusing the K-12 academic program with career concepts. This administrative placement affected not only the planning procedures used but the ultimate fate of the plan itself.

Staffing of Career Education Planning Unit--The Planning Unit consisted of the director plus three other professionals on leave: a vice principal of a suburban high school, a curriculum development specialist, and a department head from an inner-city high school.

They had agreed to join the Planning Unit for a year, taking leaves from their regular positions. They brought to the central office an up-to-date knowledge of local schools and hopefully would use it to keep their planning realistic and practical.

Significantly, the staff and its advisers did not include as official members any powerful administrators from the central office or the 12 administrative areas, teachers' union leaders, significant community spokesmen, important labor union leaders, or major employers.

The procedures used by the Career Education Planning Unit can be divided roughly into four parts: making the plan, selling the plan, getting reactions to the plan, and modifying the plan.

Making the Plan--The four-member Planning Unit staff spent the last half of 1973-74 developing a 14-point Implementation Plan for Career Education during the 1974-75 school year.

The unit was led capably by a project director who was skillful in the techniques of planning and who had a keen sense of what the schools needed to accomplish; he also had a sophisticated understanding of the interfaces between the schools and the multiple communities of System V. Under his leadership, the staff of competent, intelligent people carried out their work briskly and efficiently. Using a sensible division of labor combined with good team spirit, they worked effectively together and were extremely productive.

They worked largely alone. They spent little time with the elementary and secondary academic specialists who staffed their home division; they spent even less time with the vocational specialists who staffed the Division of Career and Continuing Education. In addition, they did not work out the 14-point implementation plan with the Superintendent's Committee on Graduation Requirements and Curricula, although most of the

plan's 14 points were aimed directly at preparing high school students to meet the graduation requirement of demonstrating a salable skill.

Perhaps because of their independence, the Planning Unit staff finished the 14-point implementation plan on time, costed each of the points, computed how many people in how many schools each point would affect if adopted, and wrote and circulated a description of the plan.

As a technical exercise, the activity was admirable. As a display of administrative style, it was akin to and worthy of the Division of Career and Continuing Education, the former home of the Project Director. It was not, however, in keeping with the administrative style of the Division of Instructional Planning, his new home. When the time came to sell the plan, that difference turned out to be important. The initial plan is summarized in Tables B-1 through B-3. That plan had a number of noteworthy features.

The plan was addressed not only to the general problem that had long concerned System's V training high school students for jobs--but with specific, urgent, and seemingly insurmountable problems such as enabling 50,000 high school students each year to demonstrate salable performance skills so that they could get their diplomas.

The plan was actually a set of options, each with its own cost and its own benefits. It was a menu of possibilities.

As to where the $2,209,885 would come from, that was quite clear. There would be no new money for the System V schools in 1974-75. Even if the citizens did vote a higher tax rate for the first time since 1957, there would still be too little money to offset inflation, replace lost state aid, and give salary raises. Programs would have to be cut. That meant the new Career Education Implementation Plan would have to be financed by cutting already shrinking programs by another $2,209,885. At the very least, the Planning Unit had a hard selling campaign ahead. Developing the 14 points had been one thing; getting them adopted as part of the tightening school budget would be another.

Selling the Plan--The Planning Unit staff presented the initial plan to the deputy superintendent, the associate superintendent for instruction, and the director of the Instructional Planning Division, all of the central office staff.

They also visited all 12 area superintendents, presented each of them with a complete set of the 150 CCEM curriculum units (a sample of what the areas could acquire under the first of the 14 points) and briefed the area staffs on how the 14 points would be carried out if approved. They followed these visits by sending terse descriptions of each of the 14 points along with a check sheet asking the area superintendents to rank the 14 in order of desirability.

Table B-1

CHARACTERISTICS OF SYSTEM V's INITIAL PLAN FOR 1974-75

- Plan offered something for everyone.
- It consisted of 14 separate elements, each of which could be used alone.
- It touched all 585 senior high, junior high, and elementary schools in System V.
- It reached 303,758 students, staff, parents, employers, and/or other adults.
- It covered grades K-12, giving attention to grades 10-12, 7-9, and K-6 in that order.
- It provided staff, money, and leeway for initiative in the local schools, the 12 administrative areas, and the central office.
- It gave the most money to the local schools ($1,306,932), less to the 12 administrative areas ($542,880), and least to the central office ($360,073).
- It covered both curriculum and guidance, offering CCEM curriculum and guidance units as good examples of instructional materials.
- It promoted modular, competency-based, semi-self-instruction as a substitute for regular courses.
- It offered to redesign high school administration around such modular instruction.
- It moved school students and staff further into the community, as by allowing students credit for off-campus work experiences.
- It moved the community further into the schools, as by using noncertified personnel in private and civic organizations as instructors.
- It linked the vocational training of high school students with the vocational training of adults.
- It cost $2,209,885 in the first year.

Table B-2

INITIAL IMPLEMENTATION PLAN FOR 1974-75

Element	Grade Levels	Scope	Budget
1A. K-3 Instructional Materials	K-3	District-wide	$ 33,825
1B. 4-6 Instructional Materials	4-6	District-wide	67,650
1C. 7-9 Instructional Materials	7-9	District-wide	9,375
1D. 10-12 Instructional Materials	10-12	District-wide	3,050
2. Staff Development	K-12	District-wide	120,000
3. Personnel Exchange Program (PEP)	7-12	District-wide	40,932
4. Career Education Digest	K-12	District-wide	15,819
5. School Activities	K-12	District-wide	540,000
6. Central Coordination Staff	K-12	District-wide	207,000
7. Campus Extension	10-12	Limited	50,762
8. Modularized High School Curricula	10-12	One high school	90,000
9. Realigned High School Admin. Roles	10-12	One high school	43,092
10. Career Advisors	10-12	14 high schools	157,500
11. Area Career Advisement Coordinators	K-12	District-wide	422,880
12. Career Information Centers	10-Adult	District-wide	120,000
13. Extend Hours of Career Info. Centers	10-Adult	District-wide	120,000
14. Career Specialists	7-9	District-wide	168,000
Totals	K-Adult	585 schools	$2,209,885

*Students, staff, parents, employers, and/or other adults.

Table B-3

DESCRIPTION OF ELEMENTS
IN SYSTEM V's IMPLEMENTATION PLAN FOR 1974-75

1A. K-3 Instructional Materials. Provide each elementary school (451) one copy each of three different instructional units.

1B. 4-6 Instructional Materials. Provide each elementary school (451) one copy each of six different instructional units.

1C. 7-9 Instructional Materials. Provide each junior high school (75) one copy each of five different instructional units from five different subject areas.

1D. 10-12 Instructional Materials. Provide each high school (61) one copy each of two different guidance units.

2. Staff Development. Allocate $10,000 per administrative area (12) for each area to train staff in career education.

3. Personnel Exchange Program (PEP). Establish capability for expanding PEP in cooperation with the Chamber of Commerce. PEP exchanges teachers and businessmen to update the school program, make business sensitive to school efforts, and find employment opportunities for students.

4. Career Education Digest. Provide a digest for each school administrator describing career education activities throughout Los Angeles.

5. School Activities. Allocate $45,000 per administrative area (12) to enable personnel in individual schools to design, initiate, and operate career education activities.

6. Central Coordination Staff. Establish a comprehensive support staff within the Instructional Planning Division to plan, coordinate, and support activities in grades K-12.

7. Campus Extension. Develop and field test 60 different competency-based career experience/exploration contract models for secondary students. Use options throughout the metropolitan area in cooperation with companies, labor, and government.

8. Modularized High School Curricula. Begin modularizing the high school program in academic areas such as Humanities, English, or Science, following CCEM performance-based models in Graphic Communications and Clerical Office Occupations.

9. Realigned High School Administrative Roles. Design the roles necessary to manage a fully modularized, student-centered high school career preparation program.

10. Career Advisors. Add 7 full-time and 7 half-time positions to enable each high school to have 1 full-time career advisor.

11. Area Career Advisement Coordinators. Appoint coordinators in each administrative area (12) to help the career advisors assigned to each high school within an area.

12. Career Information Centers. Expand the number by two sites per administrative area (12). $5,000 will be allocated to each high school to purchase materials which would be available for use by community adult schools as well.

13. Extend Hours of Career Information Centers. Extend hours of two in each of the administrative areas (12) from 6 to 9 p.m. on two nights per week to serve adults as well as high school students.

14. Career Specialists. Establish a half-time career specialist at two junior high schools in each of the administrative areas (12). Career specialists would refine curricula and arrange for field trips and speakers.

The Planning Unit staff sought to enlist support for the 14 points from community groups and from the teachers' union, as well as making a special attempt to win the approval of the curriculum supervisors in the 12 administrative areas. However, additional budget pressure on the central office from outside advocates, whether in the community or in the professional staff, was not welcome during the fiscal crisis the schools faced for 1974-75.

Reactions to the Plan--Most of the 12 area superintendents and their curriculum supervisors reacted favorably to the 14-point plan, but they recommended that its implementation be left up to the area staffs, and they did not pledge any of their area budgets to financing the 14-points.

The teachers' union adopted a resolution endorsing Career Education, but expressed concern about certain elements of it. For example, the union voiced suspicion about the possibility that private industry would take over the campus-extension programs, displacing teachers from their jobs.

Other school personnel seemed to continue their generally favorable feelings toward Career Education, feelings somewhat dampened by the fact that the long-promised CCEM curriculum units still had not come into their hands in the late spring of 1974. However, they had specific reservations. For example, teachers took a generally dim view of high school students leaving their campuses to earn credit at work, and principals voiced concern about the lack of school controls over such students when they were out in the community.

Community groups themselves, their anxieties perhaps heightened by occasionally unfavorable news stories about what career education might mean, worried about Career Education being a disguised scheme for tracking minority students away from further education and into low-paying jobs.

Most important was the reaction of the three administrative levels in the central office above the Career Education Planning Unit. The deputy superintendent felt that career education could not be implemented in 585 schools beginning in 1974-75 and suggested that a few locations be selected for implementation; the associate superintendent for instruction asked that the plan be drastically reduced in scale and in cost; the director of the Division of Career and Continuing Education wondered whether the Planning Unit staff hoped to create permanent positions for themselves in the central office, using some elements of the plan as a device for doing that. Thus, strong support from the administrative levels above the Planning Unit was not forthcoming. This meant that a crucial condition for the adoption of the plan was missing.

Modifying the Plan--The initial plan was not officially approved and, thus, was not incorporated into the System V school budget for 1974-75. Instead, the Planning Unit was asked to come up with an economy version, costing perhaps 20% of the original amount.

Several selection criteria were used. The first was the preferences of the area superintendents and their staffs. Using the results of the survey conducted among the 12 superintendents, the Planning Unit found that what they wanted most was instructional materials (but not only CCEM curriculum units). Accordingly, the staff modified the plan to retain the full amount ($113,900) for such materials.

The second was the expansion of proven programs already well known to be successful. Two were chosen for retention in the modified plan: 14 career advisors at a cost of $157,500, adding to 14 more of the 55 high schools a proven service aimed directly at helping students to make a smooth transition from school into jobs; and the Personnel Exchange Program (PEP) at a cost of $40,932, a program also intended to help high school students make a smooth transition to work both by modifying school curricula and by finding off-campus work opportunities for students. The decision to continue PEP also involved using the third and final criterion.

The third was doing what the four members of the Planning Unit staff could do themselves. That is, by dedicating the same four positions to Career Education in 1974-75, the district could accomplish 4 of the 14 points at no additional cost. Accordingly, one of the four Planning Unit staff members (or a replacement) was assigned to each of these four points:

- Personnel Exchange Program (PEP)--$40,932.
- Campus Extension--$50,762.
- Realigned High School Administrative Roles--$43,092.
- Central Coordination Staff (a director and a secretary)-- about $40,000.

That completed the list of elements contained in the modified plan. Table B-4 summarizes what was kept and what was dropped.

The modified plan contained instructional materials at a cost the district conceivably might have paid in 1974-75, even in the absence of an official Career Education Implementation Plan. It kept career advisors, continuing the annual expansion of a program underway since 1971. And it kept four other points that the Planning Unit staff (or their replacements) could carry out in 1974-75.

Every point designed specifically for grades 10-12 was retained, whereas every program for grades K-6 or adults was eliminated, except for purchasing instructional materials for grades K-6. Thus, in its modified plan, System V continued its strong interest in career preparation for students in grades 10-12, students who could not get their diplomas in 1974-75 if they did not have a salable skill.

Beyond their attention to grades K-6 and adult programs, the points dropped had one or more other characteristics that may have made them unpalatable. Some of them increased the number of administrative positions;

Table B-4

MODIFIED ...TIAL IMPLEMENTATION PLAN FOR 1974-75

Element	Grade Levels	Scope	Budget	Number of Persons Affected*
1A. K-3 Instructional Materials	K-3	District-wide	$ 33,825	40,590
1B. 4-6 Instructional Materials	4-6	District-wide	67,650	81,180
1C. 7-9 Instructional Materials	7-9	District-wide	9,375	11,250
1D. 10-12 Instructional Materials	10-12	District-wide	3,050	3,660
~~2. Staff Development~~ REMOVED	~~K-12~~	~~District-wide~~	~~120,000~~	~~9,462~~
3. Personnel Exchange Program (PEP)	7-12	District-wide	40,932	39,300
~~4. Career Education Digest~~ REMOVED	~~K-12~~	~~District-wide~~	~~15,819~~	~~1,761~~
~~5. School Assistics~~ REMOVED	~~K-12~~	~~District-wide~~	~~540,000~~	~~7,000~~
~~6. Central Coordination Staff~~ REDUCED	~~K-12~~	~~District-wide~~	~~20~~ $43,814	~~District~~
7. Campus Extension	10-12	Limited	50,762	District
~~8. Modularized High School Curricul~~ REMOVED	~~10-12~~	~~One high school~~	~~90,000~~	~~3,800~~
9. Realigned High School Admin. Roles	10-12	One high school	43,092	One faculty
10. Career Advisors	10-12	14 high schools	157,500	4,725
~~11. Area Career Advisement Coordinator~~ REMOVED	~~K-12~~	~~District-wide~~	~~422,880~~	~~34,000~~
~~12. Career Information Centers~~ REMOVED	~~10 Adults~~	~~District-wide~~	~~120,000~~	~~54,000~~
~~13. Extend House of Career Info. Cent~~ REMOVED	~~10 Adults~~	~~District-wide~~	~~120,000~~	~~3,600~~
~~14. Career Specialists~~ REMOVED	~~7-8~~	~~District-wide~~	~~168,000~~	~~9,200~~
Totals	K-Adult K-12	585 ... Some schools	$2,200 $450,000	303 ... $180,705

*Students, staff, parents, employers, and/or other adults.

some of them were for novel activities not previously undertaken; and all of them provided services to the professional staff rather than directly to students.

Why The Initial Plan Did Not Sell--Despite what seemed to be a generally favorable climate for Career Education in System V, a climate highlighted by the endorsement of its worth by the Board of Education and the superintendent, the initial plan was not approved. Why not?

There are at least seven possible explanations involving factors that were at work singly and/or in combination:

- Content of Plan. The points dropped from the plan probably had characteristics that limited their popularity. Several of them dealt with students in grades K-6 and with adults--not top priority populations for System V in 1974-75. Some were new starts, programs previously unknown. Some were innovations, programs not yet tried and proved anywhere. Some increased administrative personnel. None of those dropped could be handled by existing personnel (a customary item of spending that often escapes annual budgetary review). None of the programs dropped served students directly.
- Shortage of Money. School officials were going through an angonizingly painful process of selecting $20 million in staff and programs to eliminate when the Planning Unit turned up with its request for $2 million in new money. Financing that request would require school officials to cut $22 million in staff and programs rather than $20 million.
- Administrative Decentralization. With genuine power parceled out to 12 area superintendents, a new central office plan had to run a 12-man gauntlet, shouting its merits all the way and claiming its superiority to already funded existing programs.
- Multiple Control Points. The System V schools are not controlled from any single point or by any single body of people. In addition to the 12 administrative areas, the central office staff, the Board of Education, the teachers' union, community groups, business, labor, and the voters have a say about what will be done. Bringing them to a common viewpoint about any topic, no matter what its value, is very difficult.
- Administrative Placement of Planning Unit. If the Planning Unit had been placed in the Division of Career and Continuing Education (vocational and adult education) rather than in the Division of Instructional Planning (elementary and secondary academic education) it might have drawn stronger support from its division head. Placed where it was, it needed to win academic staff support for career concerns, admittedly a difficult and undoubtedly long-term undertaking.
- Administrative Style of Planning Staff. The director and staff of the Planning Unit were competent, energetic professionals

who went about their work in a businesslike way. When they wanted ideas, they used intelligent analysis and imagination rather than large-scale participation. The result was a technically good plan, but lacking widespread political support in the schools and in the community.

- Staffing of Planning Unit. The planners were school people who knew their program better than their politics. They built the plan to work rather than to sell. Although the members had risen to second-line and third-line administrative posts in their own schools, it was insufficient preparation for the complex decision machinery of the school system.

Project Characteristics During 1974-75

As in the five other sites, Career Education in System V continued as a small-scale special project during 1974-75. That is, a few people continued to serve as a temporary staff, administering and promoting career education throughout the year. In another sense, of course, career preparation as an element of Career Education continued as an enormous, ongoing, firmly established activity serving 320,000 high school and adult students with a federal, state, and local budget exceeding $50 million.

It is the administration, staffing, and financing of Career Education as a special project that is being addressed here.

Administration--The former CCEM project director, having continued in 1973-74 as director of the Career Education Planning Unit, continued as director of Career Education in 1974-75.

He continued to report to the head of the Division of Instructional Planning, who retained overall administrative responsibility for career education, an arrangement to ensure the infusion of career concerns into elementary and high school academic programs.

The Career Education staff itself was too small to require administrative layers below the director. All staff members reported directly to him.

Staffing--The project was staffed by the following positions during 1974-75:

Career Education Project Staff	Amount of Time
Director of Career Education	100%
Specialist for Personnel Exchange Program (PEP)	100%
Specialist for Campus Extension	100%
Specialist for New Administrative Roles	100%

Except for the director, all other staff members devoted their efforts to grades 7-12, particularly grades 10-12. All three were in charge of single-person projects, working without the aid of professional subordinates. As previously explained, the four positions were equivalent to the four used in staffing the Planning Unit during 1973-74. In fact, three out of the four positions were filled by the same individuals.

Areas of Activity

As noted above, it was necessary to reduce the scope of the original plan markedly, largely for funding reasons. It could not be expected, in view of the limited implementation that could be undertaken, that the impact of the plan elements would be felt either widely or strongly in such a large school district. It was not even anticipated that the entire district would be affected, except for the limited availability of materials, or that any significant amount of program or curriculum change would take place. What was implemented were essentially pilot programs affecting only a few students and teachers in a few schools. This is not to say that System V was without career and vocational education programs affecting large numbers of students, but only that they were extensions of existing programs having very little relationship to the work done under the NIE planning grant. The pilot programs were carried out and informally evaluated; that evaluation indicated a substantial degree of success with respect to the limited objectives for the first year. Because no large-scale impact on the district was anticipated, there was no questionnaire survey of teachers. However, we felt that it might be worthwhile to survey principals, because they were more likely than teachers to have knowledge of the planned program and its operation. It should be noted, however, that there is no way of knowing the relative extent to which their responses reflect the ongoing CE activities in the district or the materials distribution and pilot activities specifically implemented in the 1974-75 school year. Of the principals surveyed, some 44% received printed lists of goals and objectives, about 38% helped to create or select goals and objectives, and goals and objectives were reviewed or critiqued by 32%. For principals, the most available materials were lists of goals and objectives, curriculum guides, audio-visual products, catalogs of community trips, and information about available jobs.

More than half (56%) of principals had received CE training, and of those about half had received such training since June 1974, which was the period of planned implementation. About 48% of those receiving training since June 1974 had less than 5 hours, and 16% had received more than 20 hours. The most common forms of training were lectures, trips, and visits. Training was conducted primarily by the CE project staff and other school district staff members. Some 13% stated that they had been required to participate in training since June 1974. Major training attention was given to orientation to CE, career guidance activities, and information about the world of work. Training activities took place during and after school, and no compensation was provided other than released time during the school day in some cases.

Support for principals was received from speakers from industry and labor, CE project staff members, parents of community volunteers, and curriculum specialists. Most support was in the areas of making arrangements for CE trips, locating and obtaining CE materials, and making arrangements for CE speakers.

There is a substantial amount of community involvement, particularly of business and industry in CE in the district. About 61% of principals reported that they had provided CE information to community groups during the year, primarily by inviting visitors to school. Some 35% had devoted less than one hour per month to engaging interest and support from the community, and a substantial 29% had spent more than five hours per month in such activities. Advisory committees had been set up by 33% of principals. Principals indicated further that parental and community attitudes toward CE could be characterized as feeling that CE prepared students for life and that it should be required.

Outcomes

The following may be regarded as at least proxy outcomes for student learning and classroom teaching:

- Half of the principals felt that most or almost all of the students in their schools benefitted from the CE program, and 23% felt that few or none did so. Some 41% indicated that less than half of the students accomplished the goals and objectives of CE.
- About 37% of respondents stated that less than 25% of students were participating in CE programs, and 25% that participation was between 25 and 49%. Only 18% indicated a participation level of between 95 and 100% of students.
- Some 59% of respondent principals indicated that less than 25% of teachers in their schools were making special efforts to teach CE. Only 4% indicated special efforts by 75 to 100% of teachers.

Discussion and Comment

It is difficult to assess the success or failure of the limited program in the very large System V District but certain responses of principals are related to probable success and failure of implementation of any CE program in that district. Both the central staff and the area staffs support CE programs, but are unable or perhaps unwilling to allocate substantial amounts of resources to new programs in view of budgetary and other administrative limitations. Principals are key figures in implementation, and their training and previous experiences are highly relevant to success.

More than 80% of principals stated that they had had special involvement in CE prior to the 1974-75 school year, primarily in areas of planning and curriculum development. A further positive factor was that some

67% were very familiar or quite familiar with the CE goals and objectives and felt that those goals and objectives had been useful, mainly in helping to understand their own CE roles and in helping others to understand CE. About 84% felt that the goals and objectives fitted well with their curricula, and almost the same number (86%) indicated that it was quite important or very important that students accomplish those goals.

Principals perceived attitudes toward CE as being highly favorable by most interest groups, and they felt that most such groups would support curriculum change. They also felt that teachers are free to select or modify materials for use in their classrooms, which is a favorable implementation indicator as well.

With respect to training, some 58% of principals felt that they had received too little. However, about 94% felt that the training was appropriate to their activities, but 58% would have preferred training in programs other than CE. Only 19% felt that the training had had little or no influence on the extent to which CE was incorporated into their schools' curricula.

Only 14% of principals indicated that they had no role in the CE program, and none expressed uncertainty as to the nature of their roles. The most help in understanding those roles had come from the CE project staff.

Materials available to and used by principals were primarily CCEM and internal-staff developed.

Some 75% of principals felt that staff support received was appropriate to their needs, but 50% felt that it was not as much as needed. About 35% felt that support had been difficult to obtain.

About 61% of principals indicated that the CE program had seemed very satisfactory, and 88% felt that it should be continued in the next year. Only 8% felt that CE was suited to only a small portion of students. Some 78% regarded CE as being an important part of their programs, and only 29% indicated that many other programs are more important. About 44% of principals expected the CE program to remain the same in the coming year, and 27% expected it to be expanded.

System V has a number of large programs that are vocationally oriented, and those aimed at secondary schools will undoubtedly be continued and expanded. Movement into elementary grades may be slow because of resource limitations. The climate for CE appears highly favorable, but the enormous size and complexity of the district makes implementation costly in personnel and difficult even with respect to such things as communication and provision of materials. The autonomy of area superintendents means that they will have to be persuaded that CE should take precedence over some other programs. The project staff existing during the implementation year did not have the time to sell the programs to the area superintendents and certainly not to principals and teachers, although the latter may not require as much selling.

System VI

Schools

About 80,000 students are enrolled in System VI schools. There are 9 high schools, 20 junior high schools, and 80 elementary schools. The staff is composed of about 3000 teachers, of whom 96% are white.

Career Education History Before CCEM

In the 1960s a series of related but independently developed activities were undertaken in the area of vocational education. It was realized that non-college-bound students were not well or fully served in either curriculum or guidance and that there was a need to provide additional services for those students. Vocational education was seen as a means of training students for employment on leaving schools. Both educators and citizens groups were aware of this need. A related requirement was to give the student the skills and assistance needed to make career choices.

In pursuit of meeting the needs and of narrowing the gap between academic and vocational education, a number of programs were developed in System VI. Vocational training nights were scheduled as a means of providing an opportunity for various vocational and technical schools to describe their programs to students in a manner similar to that used by college representatives at college nights. The earliest vocational programs developed from such traditional areas as drafting and metal and wood shops, with an increased emphasis on employment orientation in these areas. Auto mechanics and business departments were also focused on job possibilities. A federal work-study program and two distributive education programs were in being by 1963. In 1965, a coordinator for vocational and technical education was appointed. With that appointment, an advisory committee was formed to work on promotion of vocational and technical programs and more specifically on the development of plans for an area vocational technical center and an increase in the mill levy for the specific purpose of supporting vocational education. The mill levy increase was obtained, indicating support by both the Board of Education and the community. In 1969, the state provided funding for vocational education development and plans for the System VI Vocational Technical Center were developed. The center opened in 1973.

In 1967, through the initiative of a junior high school counselor, a series of career-oriented language arts units were developed for grades 8 and 9. They were focused on career interests and aptitudes. That program has since been expanded into senior high schools. Counseling services were also expanded in the late 1960s. Emphasis was shifted toward career counseling, while continuing previous efforts in personal-social and college counseling. A career information resource center was established in 1968, using a state grant. Such centers now exist in each of the high schools, with trained vocational counselors on site.

A major organizational change, dividing the district into nine geographical administrative areas provided the impetus for further development of career-related programs. In 1970, shortly after this change took place, the superintendent for one of the areas began a program of involving parents and other citizens more heavily in planning and consultation. After a series of meetings of an advisory committee formed at that time, problems of identifying goals and objectives, curriculum change, and motivation were specified. As the committee continued to work, one of its first concerns was with an improved plan for career development. The plan called for concentration on the goal of ensuring that each high school graduate would be prepared for employment or future education. To guarantee this outcome, it was necessary to develop a CE program for the administrative area. Outside funding was sought and obtained from the State Board for Occupational Education and Community Colleges.

Before the administrative area program backed by state funding began, the opportunity to apply for the CCEM project arose. The application was made, and System VI was accepted as one of the participating districts. A project staff was created, and the work was centered in the one administrative area that had been planning to go ahead on the basis of the state grant. As was the case in the other districts, the project focus was narrowed, and most of the effort was devoted to curriculum development with little attention to staff development, community relations, information and program support systems, guidance, and counseling. The potential for change that might have existed if the program had been broader was, therefore, limited.

After the first year of participation in the CCEM project, the supervision of the staff was shifted from the administrative area superintendent to The Division of Instruction in the district office. This was regarded as an indication of greater commitment to CE on the part of the district, and it also provided an opportunity to diffuse CE more widely throughout the district. With the cessation of CCEM funding, however, the district could no longer support the entire CE staff that had come into being. Initially only one full-time employee was assigned to work with the administrative area superintendent in implementing a CE program for that area. The district was asked to participate in the development of a Junior High Occupational Exploration Program that made available external funding for one more professional, and a third was added when the implementation planning process began.

Implementation Plan for 1974-75

The System VI program was conducted on a pilot basis. It was anticipated that a full-scale Career Education program would be installed in four to five years. The planning grant was used for staff members to review commercial materials and to develop a K-3 resource kit. In addition, 35 K-3 CCEM units were revised to make them sequential and reduce their length. Student outcomes were identified, along with indicators of success and test items. Some junior high school units were also developed, as were simulation units for an Occupational Exploration Program. In-service teacher training also was undertaken. The pilot program called

for Career Education participation by six elementary and three junior high schools that would involve about 50 teachers.

Project Characteristics During 1974-75

It should be noted from the discussion above that the movement for a CE program in the district was driven essentially by one area superintendent and fueled entirely by outside funding. There is evidence of broad acceptance of the concept throughout the district, but no great reason to believe that an implementation planning effort would have taken place without the planning grant. As was the case in the other districts, the plan was based on voluntary participation by teachers and principals. There were no mandates and no strong motivation emanating from the district headquarters, although the planners went about their tasks with great enthusiasm and skill with the goal of promoting a more positive climate for CE.

The planning focus was on one administrative area with, the ultimate intent to expand the program district-wide. Needs assessment and the establishment of operational objectives were undertaken, along with the identification of activities and materials required to meet objectives and the development of an evaluation plan. Part of the assessment of available resources consisted of a review of CCEM materials. Some were found to be of low utility, and others were organized into a K-3 resource kit. Potential community resources were also identified.

During the planning period, a proposed CE budget for 1975 (district funding is on a calendar year basis) was submitted. It called for the expenditure of about $188,000 in that year. At about the same time, a planning prospectus was developed. It provided for a five-to-eight-year CE development period, with only pilot activities being undertaken in 1974-75, which is the focus of this implementation study.

In view of the limited pilot nature of the program and that it could not get underway until January 1975, it was felt inappropriate to circulate the teacher and principal questionnaires that had been developed to obtain program description and evaluation data in the other districts. Instead, data collection was accomplished through a series of in-depth interviews with almost all of the teacher and principal participants in the pilot program and with district staff members having responsibilities for the program.

Areas of Activity

The System VI program was conducted on a pilot basis during 1974-75. It was anticipated that a full-scale Career Education program would be installed over the next four to five years. The planning grant was used for staff members to review commercial materials and to develop a K-3 resource kit. In addition, 35 K-3 CCEM units were revised to make them sequential and to reduce their length. Student outcomes were identified,

along with indicators of success and test items. Some junior high school units were also developed, as were simulation units for an Occupational Exploration Program. In-service teacher training was undertaken. The 1974-75 pilot program called for Career Education participation by six elementary and three junior high schools and involved about 50 teachers.

At the time of the conduct of our interviews with teacher and principal participants in the pilot CE program, it had been in operation for only a few months, and there had been no opportunity for a formal evaluation. The interviews were designed to cover the same areas as were covered in the questionnaires used at the other sites. The areas included program description, training, materials, support, use of community resource, student and teacher characteristics, and evaluation. Interviews were conducted on a group or individual basis in each of the nine elementary and junior high schools participating in the program. The principal and all or almost all of the participating teachers in each school were included in the interview groups.

School participation in the program was on a volunteer basis, and more schools volunteered than could be included in the program. By the time of pilot implementation, only two project staff members were still assigned to CE in the district office, but both had been working in the CE area since the beginning of the CCEM project, and both had been teachers, school administrators, and district staff members long enough to be thoroughly familiar with the district and its personnel. Because only a small number of schools and teachers were involved, they had had ample opportunity to meet with them and to prepare for implementation. By the same token, they could and did keep in continuing communication with teachers and principals and were able to oversee the program and receive evaluative feedback on a regular basis.

Many of the teachers had participated in the CCEM project, and all were familiar with it and with the materials that resulted from it. They had also had ample opportunity to study the curriculum materials before they began classroom implementation. The pilot implementation was arranged in such a way as to make possible a quasi-experimental comparison of two sets of elementary curriculum units from different sources. Three of the schools used one set, and the other three employed the other group.

Because the program started in the middle of the school year, it had to be fitted into an already existing curriculum and might make it necessary to drop something else. It was anticipated that in future years there would be time to infuse the materials and integrate them more fully with what was already being used, which would make for substantially more effective implementation and better outcomes.

Few of the participating teachers had had more than two hours of orientation and training in the period immediately preceding pilot implementation. That brief orientation was sufficient to introduce them to the materials if they had not previously seen them, but not much more could be done. Few of the teachers felt that the shortness of the orientation was a serious deterrent to their effective use of materials or to the

introduction of CE concepts into their classrooms. Many stated that they would not have wanted to spend more time than that in orientation because regardless of previous training, the main task was to integrate the program with what they were already doing and that had to be done by each teacher individually. Some teachers had previous workshop training in CE, but that training was three years ago.

All teachers felt that they had sufficient materials for use in teaching the relatively brief curriculum units, but the materials themselves were thought to have a variety of deficiencies. The implementation plan had taken account of the probable need to revise materials, so all such deficiencies were reported to the project staff.

Support from project and district staff was thought to be ample, but there was one area (that of providing lists of available community resources) that had not been developed as extensively as teachers desired.

Most teachers said their students had reacted positively to the CE program and had profited by it.

Teachers felt the need for rigorous program evaluation, and provision had been made for their reporting problems or particularly good features to the project staff. In addition, some measurement of student outcomes was undertaken, but techniques for doing that required improvement in the opinion of many of the participants.

Discussion and Comment

Resources for implementation were ample in view of the relative smallness of the program, and there were no serious difficulties in the process. It should be noted, however, that all participants were enthusiastic volunteers, already committed to the CE concept, and that large scale implementation would have required a substantially greater allocation of resources and alteration of curriculum, neither of which could be assured.

CE has achieved the status of a line item in the budget, indicating that the district intends to continue the effort. In accordance with the plan, however, implementation of programs will take place over a five-to-eight-year period, and there will undoubtedly be competition for resources. As with any long range plan, it is quite probable that there will be (and should be) alterations so that the process may take even longer than the five to eight years planned.

The general district climate for CE is favorable, and substantial numbers of teachers and staff members have had training and experience with CE. The project staff in particular has learned a great deal about effective implementation and will be able to apply its considerable talents and skills in the future if the development process continues.

Inevitably, the use of outside funds almost exclusively has meant a limitation on local control and on ability to tailor the CE programs to particular district needs. Internal funding will not suffer from that limitation, but under current conditions there is a lot less money to work with. It appears also that the large amount of external funding did not lead to greatly increased district commitment to CE, but only to a willingness to continue development at a moderate pace.

As is the case with the other districts, no rational change model or strategy was adopted and followed. Implementation was pragmatic and cautious, taking full account of the environment in which it was to take place. The primary task for the project staff was to gain entry and acceptance and then to tailor their thinking and planning to the realities of the local situation. That task was accomplished with considerable success, and it appears probable that CE development will continue, although not necessarily at a very rapid pace.